

CCAAACCCAG CTATCAACCC CATAAAGATA AAAAGAATGG TCTACTAAGC AAGCTTCCTT	7440
CCTCTGATTT TCAAACAAAA ATCTCTCATT GCTTACATTG TTCTCTCAAG CTTATTGGTC	7500
ACTATTATCA ATATAGGTGG TTCTTACTAT CTCCAAGGAA TCTTGGATGA ATACATTCCA	7560
AATCAGATGA AATCAACTTT AGGAATCATC TCAGTTGGTC TGGTTATCAC CTATATCCTC	7620
CAACAAGTCA TGAGCTTCTC CAGAGATTAT CTCCTAACCG TTCTGAGTCA GAGATTAAGT	7680
ATTGATGTGA TTTTATCCTA TATTCGCCAT ATTTTTGAAC TTCCCATGTC TTTCTTTGCG	7740
ACACGTCGTA CAGGAGAAAT CATTTACGTA TTCACAGATG CTAAGTCTAT TATAGATGCC	7800
TTGGCTTCTA CCATTCTTTC TCTTTTCTG GATGTTTCTA TTCTGATTCT TGTAGGAGGC	7860
GTCTTACTGG CACAAAACCC TAATCTCTTC CTTCTTTCTC TTATTTCCAT TCCTATATAC	7920
ATGTTTCATCA TCTTTTCTTT TATGAAACCT TTCGAAAAAA TGAACCATGA TGTCATGCAA	7980
AGTAATTCTA TGGTTAGCTC TGCCATTATC GAAGATATCA ACGGGATTGA AACTATAAAG	8040
TCGCTCACGA GTGAAGAAAA TCGCTATCAA AATATAGACA GCGAATTTGT AGATTATTTG	8100
GAAAAATCCT TTAAGCTCAG TAAATATTCT ATTTTACAAA CGAGTTTAAA GCAGGGAACA	8160
AAATTAGTTC TGAATATCCT TATCCTATGG TTTGGCGCTC AATTAGTCAT GTCAAGTAAA	8220
ATTTCTATCG GTCAGCTGAT TACCTTTAAC AACTTTTTTT CTTACTTTAC AACTCCTATG	8280
GAAAATATTA TCAACCTCCA AACCAAATC CAATCTGCGA AGGTCGCTAA TAACCGTTTG	8340
AACGAAGTCT ATCTAGTCGA ATCTGAATTT CAAGTTCAAG AAAACCCTGT TCATTACAT	8400
TTTTTGATGG GCGATATTGA ATTTGATGAC CTTTCTTATA AGTATGGTTT TGGATGAGAT	8460
ACCTTAACAG ATATTAATCT CACGATTAAA CAAGGAGATA AGGTTAGCCT AGTTGGAGTT	8520
AGTGGTTCTG GTAAAACAAC TTTAGCCAAA ATGATTGTCA ATTTCTTTGA ACCCTACAAA	8580
GGGCATATTT CCATCAATCA TCAGGATATT AAAACATTG ATAAAAAAGT CTTGCGCCGT	8640
CATATTAATT ACCTACCCCA ACAAGCCTAT ATCTTTAATG GCTCTATTTT GGAAAACTTA	8700
ACCTTGGGCG GTAATCATAT GATTAGTCAA GAAGATATTC TAAAAGCTTG TGAAGTAGCT	8760
GAAATCCGTC AAGACATTGA AAGAATGCCT ATGGGCTATC AACTCAGCT CTCTGATGGA	8820
GCTGGTCTAT CAGGAGGACA GAAGCAACGA ATCGCTCTCG CTCGTGCTCT TTTAACTAAA	8880
TCTCCTGTTT TAATACTAGA TGAAGCTACT AGCGGTCTTG ATGTCTTGAC TGAGAAAAAG	8940
GTTATAGATA ATCTTATGTC TCTAACTGAT AAAACCATTG TCTTTGTAGC CCATCGTCTC	9000
AGTATAGCCG AACGAACCAA CCGTGTCATT GTTCTTGACC AGGGGAAAAT CATTGAAGTT	9060
GGTA	9064

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(2) INFORMATION FOR SEQ ID NO: 18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7780 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

CTCCATTTTT TTGATTCAT AAATAACAA CCTCTCTGTT AATTTTGTAT AATTATAACG	60
ATATCCAAGT TACTTGTCAG GTGTTTTTTTA AATTTTATC TCAAAAATAT TTTTTCGTTC	120
AAAAAAGGA GCCATCAGTT GATTTCAGC TCCCTTTTAT ACAGAATTAA ACTATTTTAT	180
AGTTCGACAA TCTTACCTGT TTCAAAGTAG ACAACCCATT CACAGATATT TTTAGCATAG	240
TCACCGATAC GCTCCAAGTA GGAAATAACT TGGAAATAAT CACGACCCGT AACAAATGGCT	300
TCTGGATTTT TCTTAATCTC TTCAGTCGCA AGGTCACGGA TAGTTTCAAA ATAGTGGTTA	360
ATTTGCTCAT CCATGGAGGC CACCCGGTAT GCGTCGTCAA CAGAACCATT AAGATAAAGA	420
TCAAGTGCTG CTTCCACAAC GCTTTTAACT TCACGTCCCA TTTTTTTAAT TTCTTCCTCT	480
ACAGCTGGAA TGCCTCTTC CCCCTTCATA CGGATGGTTG CCTGGGCAAT GGCTACAGCG	540
TGATCCCCCA TACGCTCCAC ATCTGATACA GCCTTAAGGA CAGTCAAGAC TGTACGCAA	600
TCTTGAGAGA CTGGTTGTTG GAGTGCGATC ATTTCAAATG ATTTCTTTTC CAGTTTCACT	660
TCGTATTCAT TTAATTCTGC ATCATCTTCG ATGACCTCTT TTGCCAGGTC ACGGTCATGC	720
GTGACAAAAG CACGTACCGT ACGATTGATT TGTGAGAGCA CTTCTTGTC CATAGCGTAG	780
AACTGGTTAT GTAATTTCTC TAAATCTTCT TCAAATTGAG ATCGTAACAT CTTTCATCTC	840
CTTATCCAAA TTTTCCTGTA ATATAGTCTT CCGTTTCCTT GTGTTGGGGA TCAAGGAACA	900
TCTGCTTGGT ATCATTAAT TCAATCAAAT CTCCATCTAG GAAAAATCCT GTCTTATCAG	960
AGATACGTGA AGCTTGCTGC ATGGAACGGG TTACCAGAAG CATGGTGTAC TTGTCTTTTA	1020
GACCATACAA GGTTTCCTCA ATTTTACCAG CTGAAATCGG ATCCAAAGCC GAAGTTGGCT	1080
CATCCAAGAG GATGATTTTA GGACTAGTTG CCAAGACACG GGCCACGCAG ACACGCTGCT	1140
GTTGACCACC TGACAATCCA ATAGCTGAAT CATATAGACG ATCCTTGACC TCATCCCAGA	1200
TAGAGGCACC TTGCAAGGCT TTTTCTACGG CTTTCATCCAG AACCTGCTTA TCCTTAATTC	1260
CATTGATACG AAGCCCGTAG ACAACATTCT CATAGATAGT CATAGGGAAA GGATTAGGTT	1320
GTTGGAAAAC CATTCGATT TCCTTACGTA ATTCAACCGT ATCTGTACGC GGACTGTAGA	1380
TGTTGTGACC ATTGTACACC ACGGATCCAG TTGTGGTCAC CTCTGGATTG AGATCTCCCA	1440

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TGCGGTTGAG	AGACTTGAGG	AGGGTTGACT	TCCCTGATCC	AGATGGACCA	ATCAAGGCTG	1500
TAATTTTCCTT	AGGTTGGAAA	GATAGGGAAA	CACTATTCAA	AGCCTTCTTT	TTATTATAAT	1560
AAACGGACAG	GTCTGATACC	TGTAAAATCG	CATCTGTCAT	ACGGTTTCCT	TTCTAACCAA	1620
AGTGACCAGA	TACATAGTCA	TTGGTGGACT	GTAGCTTGGC	ATTTTGGAAA	ATAGTTGCAG	1680
TCTTGTCATA	CTCAATCAAA	TCACCCAAGT	AAAAGAAGCC	TGTATAGTCA	CTTGCACGAG	1740
CAGCCTGCTG	CATATTATGC	GTTACAATGA	TGATGGTAAA	GTTTTTCTTG	AGCTCAAACA	1800
TGGTCTCTTC	TAGTTGCATG	GTCGCAATCG	GATCCAAGGC	TGAGGCTGGC	TCATCCATTA	1860
AGAGGATATC	TGGCTTAACA	GAGATGGCAC	GAGCGATACA	GAGACGTTGT	TGCTGACCAC	1920
CTGATAAGGT	CAAGGCTGAC	TTGTGGAGAT	CGTCTTTAAC	CTGATCCCAG	AGGGCAGCCT	1980
GACGAAGGGA	GGTTTCTACG	ATTTTCATCTA	GGACTTGCTT	ATCCTTAACT	CCAGCACGTT	2040
CATGCGCAAA	GGTAATATTA	CGGTAAATTG	ACTTAGCAAA	TGGATTGGGA	CGTTGAAAAA	2100
CCATTCCAAT	GTGTTTACGC	ATTTCATAAA	CGTTGATTTT	TGGACGGTTG	ACATCAATTC	2160
CACGATAGAG	AATCTGCCCA	GTTACTTTAG	CAATATCAAT	AGTATCATTC	ATGCGATTGA	2220
GACTGCGTAA	GTAGGTAGAT	TTCCCCGATC	CCGACGGGCC	AATCAAAGCT	GTAATTTTAT	2280
TTCTTTCAAA	TTGCATATCA	ATCCCCTTAA	TGGATTCATT	TTTACCATAG	TAAACATGGA	2340
CATCCTTAGT	AGAAAGGGCT	ACTTTTCTT	CAGGAAAGGT	AAGGATATGC	TTCTCATCCC	2400
AGTTATATGT	TGACATGGCT	TCTCCTTTAG	GCAGCGGTTA	ATTTCTTGTTG	TAGATAGCTT	2460
CCGAACCTTAC	GAGCTCCAAA	GTTAAAAATC	AGGATAAAGA	TCAGGAGCAC	AGCGGCAGAA	2520
CCTGCTGATA	CAATGGTTCC	ATCTGGAATA	GTGCCTTCAC	TATTGACTTT	CCAGATATGG	2580
ACAGCCAAGG	TTTCTGCTTG	ACGGAAGATA	GAGATGGGGC	TAGTCACACT	GAGGATATTC	2640
CAGTTAGACC	AGTCAAGAGC	TGGCGCCGAT	TGCCCTGCTG	TATAGATCAG	AGCTGCAGCT	2700
TCGCCAAAGA	TACGACCAGA	TGCCAAGACG	ACACCCGTTA	CAATACCTGG	AAGCGCTTCC	2760
GGAATAACAA	CATGAACCAC	TGTCTCCCAG	CGAGAAATCC	CAAGAGCCAG	ACCAGCCTCA	2820
CGTTGGGTAT	GGTGAACGTG	TTTCAAACCTA	TCCTCTACAT	TACGCGTCAT	CTGAGGCAAG	2880
TTAAAGACTG	TCAAGGCCAA	GGCACCTGAA	ATGATTGAAA	ATCCATACTC	AAACTGGACT	2940
ACAAAGATCA	AGTAACCAAA	GAGACCCACC	ACCACTGATG	GTAAAGAGGA	CAAAATTTCA	3000
ATACAAGTCC	GCACAAAGTT	GGTAACAGGA	CCTTTTTTGTAG	CATATTCAGC	CAAGTAAATC	3060
CCAGCTCCCA	TAGAAAGAGG	TACAGAAATA	ATCAAGGTAA	TGACCAATAG	GAAAAAGGAA	3120
TTGTAAAGCT	GAATGCCAAT	CCCACCACCT	GCTTGAAAAG	CAGAAGACCT	TCCAGTCAAG	3180

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AAAGACCAAG	AGATATGGGG	CAAGCCCCGA	ACCAAGATAT	AGAGAATCAA	GGAAGCCAAG	3240
ATTGTCACAA	TGATGCTAGC	AATCGTATAG	AGGACAGCTG	TTGCAAGTTT	ATCTAATTTC	3300
TTAGCGCGCA	TAATTTTTCT	TTCCTCTTTC	TTTCGTAATC	AATTTAATCA	CACTGTTAAA	3360
AACTAAGCTC	ATCAAGAGCA	GTACCAAGGC	CAGTGACCAG	AGAACATTAT	TATTTACAGT	3420
TCCCATGACA	GTGTTCCCAA	TTCCCATAGT	TAATATAGAA	GTAAAGTTG	CAGCTGGTGT	3480
GGTCAAGGAA	GTTGGGATAA	CAGCTGAGTT	TCCGACAACC	ATCTGGATAG	CTAGAGCCTC	3540
ACCAAAGGCA	CGCGCCATCC	CAAAGACCAC	TGCAGTGAAA	ATACCAGAAC	GGGCCGCCCT	3600
CAAGATCACA	CGCCAGATAG	TCTGCCAGCG	AGTGGCTCCC	ATAGCGAAAC	TGGCTTCACG	3660
ATAATAACGA	GGAACCGCAC	GCAAGCTATC	CGTTGTCATA	AAGGTTACGG	TCGGCAAAAT	3720
CATGACAAAG	AGGACGGAAA	TCCCTGACAA	AATCCCCAAA	CCAGTCCCAC	CAAAGACACT	3780
GCGAACAAAG	GGAACGACGA	CTTGCAAGCC	AATAAATCCG	TACACTACTG	AAGGAATCCC	3840
AACCAGGAGT	TCAATAGCTG	GTTGCAAAAT	CTTCGCCCCCT	TTTGGTGATA	CTTCGGTCAT	3900
AAAAACTGCT	GCACCAATAG	CAAAGGGTGT	TGCGATAAAG	GCTGAGAGAA	TGGTAACGAT	3960
AAAGGAACCC	AAAATCATAG	GAAGGGCACC	AAATTCTTTA	CTAGAAGGAT	TCCAAGTTCC	4020
TCCCAAAAGA	AAGTCAAAGA	TATTCACACC	ATTGACAAAG	AAGGTCGACA	AGCCTTTTTG	4080
CGCTACGAAA	ACCAAAATCA	TGGCCACAAG	GATGACTATC	AAAGAAAGAC	AGGCAAAGGT	4140
CAAACCTTTT	CCTAATTTCT	CCAGACGAGA	ATTCTTTGAT	GGAAGCAACA	TTTTCTTAGC	4200
TAATTCTTCT	TGATTCATTA	TTGTCTCCCT	TCCAACACTG	TCACAGTTCC	GGCAGCATCT	4260
TTTTCAACCT	TCATTTCTTT	AATCGGAATA	TACTTCAATC	CTTTGACAAT	CCCTTCTTGG	4320
GTCTCATCCG	AGAGAACAAA	ATTGAGAAAT	TCTGCAGCCA	ACTCATTGGG	CTGCCCCAAT	4380
GTATACATAT	GCTCATAAGA	CCACAAGGGC	CAATTATTGC	TACTTATATT	TTCTGGACTT	4440
AAGTCATAGC	CATTCAACTT	CATGCTTTTG	ACCGAATCAT	CTATATAGGT	AAGAGATAAA	4500
TAAGAGATAG	CTCCTGGACT	TTTTGATACG	ATTGATTTTA	CCGCTCCATT	TGAATCCTGC	4560
TCCTGACTTT	GCATGGCAGA	CTGACCTTCC	ATAATGACAG	TATCAAAGGT	AGCACGAGAG	4620
CCAGAGCCGG	CTGCCCATT	GATAACAGAG	ATGGGTAAGT	CCTTACCACC	AACCTCTTTC	4680
CAATTGGTTA	CCTCACCTAT	GAAGATTTGA	CGAAGTTGCT	CTGTCGTTAG	GTTATCAACA	4740
TCAACCTCCT	TATTGACAAT	CAGAGCCAAG	CCAGCTACCG	CGACCTTGTT	GTCAACAAGA	4800
GCAGAAGCAT	CAATTCCGTC	TTTTTCCTCA	GCAAATACAT	CTGAGTTTCC	TATATCAACT	4860
GCCCCAGACT	GAACCTGGGA	CAAGCCTGTA	CCAGAACCTC	CCCCTTGGAC	ATTGACCGTT	4920
TTTCCAACAT	GGATCGTGCC	AAATTCATCT	GCCGCTACTT	CAACCAAGGG	TTGCAAGGCA	4980

GTTGAGCCAA	CAGCCGTTAT	GGATTCTCCA	CGATCAATCC	AGCTAGCACA	GCCTACTAAA	5040
CAAGCCGTCA	GCCAAAAAGC	GATAAGAGAC	AGAGCAAGCT	TTTTTCTTTT	TTTCACTGTT	5100
TTTCTCCTCG	AAAATAATTA	TGAATACTGT	GAATTTTTTA	AGTAGTTCTT	TATGAGTTGA	5160
CGCATGAATT	CTTACCAAAT	TTCTGCGCAA	TTGATTATTT	ATATAATATA	GGCTATATTA	5220
CTCTTTCTTA	ACCTCCTTTT	TTTCATATGTG	GATAAAATCT	CTTGTCTATC	CCTTCCCCCA	5280
TTGTCACCCA	TTATAGTCAT	TTCTGTCTCT	TTTTTCCCCT	TTTTAATGCA	AGGGAAATTA	5340
CTCTCCTTAG	ATGATAATCC	AAAAGCTAGA	AAGGTATCTC	AAACCTCTCT	ACTCTCCCAG	5400
ACTAGTTTAC	AACTAAAAGG	AAAAGATTCT	ATTTTATGAG	AAATCTAGTT	TACAAGCGGT	5460
AAGAACGCTA	ATAACTAAAC	TTCTTGTACT	CTTTGAAAAT	CTCTTCAAAC	CAGTGTTTTG	5520
AGCTATCTAT	GGCTAGCTTC	CTAGTTTGCT	CTTTGATTTT	CATTGAGTAG	TAAAACTACA	5580
TGTAATGGCA	ATCAAGATAT	CAAGAATCAT	CCTACTAAAA	AAATCCATAC	TTTCACTATA	5640
ACATAGAATA	AGATATTTGA	CTAGCATTTT	CATTTGAATC	TGAGGCCTTT	TGGAAAATAA	5700
TTTTTCAAAA	CATTTCCAGT	AACCTTTGCA	AAGCCCAAGC	CATTGCCTTT	AACCAAAACT	5760
TGGTACCAAC	CATTTGGCAG	ACTTTCTGCC	AGCTGAACGG	TTTCTCCAGC	CGCATACTTG	5820
ACAAACGCTT	CTTGGCCAAT	TTCAACCGAC	TGTTTCGACCT	GACTCGGTTT	CAAGGCTAAA	5880
CCAAGAGCGA	AACTGGGCTC	AAAGCGTTTC	TTCTTAAAAG	TACCCAGATG	CAGTCCATTG	5940
CGAGCAATCT	TGAGCTTCCA	TAAATCTGGC	AAAAGTTCTG	GCAAGAGATA	AAGCTGGTCT	6000
CCAAAAATCT	GCAAGATACC	CGGTAGATTG	ACCTTCAAAT	GGTTTTGGGC	AAATTCCTGC	6060
CACAAGGCAA	CTTGTTACAG	GCTGAGGTTA	CTCTTACTTG	CCTTAAATTT	AGGAGCTGGA	6120
TTGTTACCCT	TAAACTGTAG	ATGGGCAACA	AACTGACCCT	CTCCCTTAAA	CTGATGAGGA	6180
TACATCCGAG	CCGTTTCTGG	CAGGTCAATA	CCAGCTACCA	TTCCATTGAT	ATGCTCTACT	6240
GGCAACAAGT	CAAAATCATA	CTCTTCCAGC	AACCAATTGA	CAATCTCTTC	GTTTTCTCTG	6300
GGTGCCAGG	TACAGGTCGA	ATAAACCAGA	TGACCACCTT	CAGCTAACAT	GGTCACTGCA	6360
TCCTCCAGAA	TTTCTCTTTG	CAAGCTAGCA	CATTGACTCG	GATAATCTAA	GCTCCAATAG	6420
TCCATAGCAT	CAGGTTGCTT	ACGAAACATT	CCTTCACCAG	AGCAAGGGGC	ATCAAGAACG	6480
ATTAAGTCAA	AATAGCCTTT	AAAGACCTTG	ACCAAGCGGT	CGGCAGATTC	ATTGGTCACC	6540
ACGACATTTG	TCGCTCCAAA	ACGCTCCATG	TTTTCAACCA	AAATCTTAGC	CCGTTTGCTT	6600
GAAATTTTCAT	TGGAAnCAAG	TAGCCCCTCC	CCTGCTAGAT	AGGCTGCCAG	TTGAGTTGAT	6660
TTGCCCCCG	GTGCAGCAGC	CAAGTCCAAG	ACCTTCATAC	CAGGACTGGG	TTGGGCTACT	6720

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TGAGCCACCA	TTTGAGCAGC	AGGTTCTTGC	GAATAAACTA	AACCTGTAGC	ATGCTCAGGC	6780
GATTTCCCTG	AAACCTTCCC	ATAGTGGCCC	CAAGGGGTTT	GAGTAATGGC	ATCAGAAAAG	6840
GAAAGTTGCT	CTTCTTTTAA	GGGATTGACC	CGAAAGGCCG	AAACCGCTTC	CTCCTCAAAA	6900
GAGGCAAGAA	AATCTCTTGC	CTCATCTCCT	AGTATCTCTT	TATATTTTTC	AACAAATCCT	6960
TCTGGAAATT	GCATTTAAGT	TCTTTTCCTT	TCGTAAATAT	AGGACTGAAT	TTCCTCCTGC	7020
ATCTCAAGAG	GCACCATCAT	GACCGGCTGT	CTGGTTTGAA	AATCAGGAGC	TTCACCAAAA	7080
AGGGTCACAA	CCCGATAGCC	CAGACTTTCC	CCTAAAATAC	TAGCTGCGGC	ATAATCCCAT	7140
GGTTCAGAT	AAGTGAGATA	GGTCAACAAA	CGCCCTGACA	AAATCTTGGC	AAAATAATG	7200
GCCGCACTTC	CATAGACACG	AACACCAAGA	ACCGCTCGGC	TCAAATCAGC	CAGCCCCCAT	7260
TCATTGGTTT	CCAGCATACC	ACTATTCCTT	GCAATGAGAA	AATCTCCAAG	TGGTTTAGTT	7320
TTAAAAGGAG	CTAGGGACCT	ATCATTTAGA	CAAACCTGGA	ATTCCCCACC	ACCGTGGTAA	7380
CAATCCCCTT	TGACCACATC	ATAAATCAGA	CCAAACTGTC	CCTGACCATT	TTCAAAATAA	7440
GCCATCATAA	CAGCAAAATC	TTCCTGCTGG	GCTACAAAAT	TATTGGTACC	ATCAATGGGA	7500
TCAATGACCC	AAACCTTGCC	CTCTTGAACC	GAGGCTCGCA	GACAACCTTC	TTCAGCACAA	7560
ATCTTATCCT	CAGGATAACG	GGACAAAATC	TCACCAACCA	AGAGTTCCTG	AACTTCTTTG	7620
TCCAGTCTGG	TCACCAAATC	TGTTGGAGAG	GAATTGGTTT	CAACACGCAA	GTCTTCCTGC	7680
ATATGGTCAA	GAATGTACTG	ACCTGCTTTC	TTAACAAGCT	CTTTAGCAAA	TTCAAATTTA	7740
CTTTCCAAGA	GAAATCTTTC	CTTCCCCTTT	TTCTTTGGGG			7780

(2) INFORMATION FOR SEQ ID NO: 19:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 4820 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

GTAATGATAT	AGGAACACCA	GGTGACCTGA	TGGGACGTCG	TAAGCCTATG	AACTACTAGC	60
TGCTAAAGGC	TTTAAAGATG	GTATGGTACC	ATATATCTCA	AACCAATACG	AAGAAGAAGC	120
CAAACAAAAG	GGCAAGACAA	TCAATCTCTA	CGGTAAAACA	AGAGGTTTGG	TTACAGATGA	180
CTTGGTTTTG	GAAAAGGTAT	TTAATAACCA	ATATCATACT	TGGAGTGAGT	TTAAGAAAGC	240
TATGTATCAA	GAACGACAAG	ATCAGTTTGA	TAGATTGAAC	AAAGTTACTT	TTAATGATAC	300
AACACAGCCT	TGGCAAACAT	TTGCCAAGAA	AACTACAAGC	AGTGTAGATG	AATTACAGAA	360

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ATTAATGGAC GTTGCTGTTC GTAAGGATGC AGAACACAAT TACTACCATT GGAATAACTA	420
CAATCCAGAC ATAGATAGTG AAGTCCACAA GCTCAAGAGA GCAATCTTTA AAGCCTATCT	480
TGACCAAACA AATGATTTTA GAAGTTCAAT TTTTGAGAAT AAAAAATAGT GTCTACTATT	540
AGGAAATAAA GTTTAAAAAG GTGATGAAGA ACAAACCAAG ATTCAAGCAG GAATTCCTAC	600
TGATAATGAA GTAAGTTATG ATCTTATTTA TCAGCAGGAA ACTCTTCCTG CAACAGGTTC	660
ATCAACTTCT GAGCTTACAG CTTTAGGCCT ATTAGCTGTT GGTAGTTTAG TTCTTTTGGT	720
TCATAATATG ACGGGAACAG TTTTTTGCTC CCTCTGAAAA GTCATCATTT GATGGCTTTT	780
TTCTATATAG GGTAAAAGAT AGGGTAAAAG GCTATCATCG GACAAAATAA AGAAGGCATG	840
ATATAATATA AAGTAGATTT CTATGTCATA AAACAAGAAC TGTTTGGACA TCATTCATTT	900
GAAACTCTC TATGTTCAAA CAATAGTAAA ATAAATAGG GGATCTAAAT CCTTGCTATG	960
AAAGGAAAAA ACTCAATGGC TACTATTCAA TGGTTTCCTG GTCACATGTC TAAAGCTCGT	1020
CGACAGGTGC AGGAGAATTT AAAATTTGTT GATTTTGTGA CGATTTTAGT AGATGCACGC	1080
TTGCCTCTAT CTAGTCAAAA TCCTATGTTG ACCAAGATTG TTGGTGATAA ACCAAAACTC	1140
TTGATTTTAA ACAAGGCCGA CTTGGCTGAT CCAGCAATGA CCAAGGAATG GCGTCAGTAT	1200
TTTGAATCAC AAGGAATCCA GACGCTAGCT ATCAACTCCA AAGAGCAAGT GACTGTAAAA	1260
GTTGTAACAG ATGCGGCCAA GAAGCTCATG GCTGATAAGA TTGCTCGCCA GAAAGAACGT	1320
GGGATTCAGA TTGAAACCTT GCGTACTATG ATTATCGGGA TTCCAAACGC TGGTAAATCA	1380
ACTCTGATGA ACCGTTTGGC TGGTAAAAAG ATTGCTGTTG TTGGAAACAA GCCAGGGGTC	1440
ACAAAAGGTC AACAATGGCT TAAAACCAAT AAAGACCTGG AAATCTTGGA TACACCGGGG	1500
ATTCTCTGGC CTAAGTTTGA GGATGAAACT GTTGCACTTA AGTTGGCATT GACTGGAGCT	1560
ATCAAAGACC AGTTGCTTCC TATGGATGAG GTTACCATTT TTGGTATCAA TTATTTCAA	1620
GAACATTATC CAGAAAAGCT GGCTGAACGC TTCAAACAAA TGAAAATTGA AGAAGAAGCG	1680
CCTGTGATTA TTATGGATAT GACCCGCGCC CTCGGTTTCC GTGATGACTA TGACCGTTTT	1740
TACAGTCTCT TCGTGAAGGA AGTCCGTGAT GGCAAACCTG GTAACATAC CTTAGATACA	1800
TTGGAAGACC TCGATGGCAA CGATTAAAGA AATCAAAGAA TTCCTTGTTGA CAGTCAAGGA	1860
GTTAGAAAGC CCTATTTTTT TAGAGCTTGA AAAGGATAAT CGCTCAGGAG TTCAAAGGA	1920
AATCAGCAAG CGTAAAAGAG CCATTCAAGC TGAATTAGAT GAAAATTTGC GCTTGGAATC	1980
CATGCTTTCT TATGAAAAAG AACTTTATAA GCAAGGATTG ACCTTAATTG CAGGTATTGA	2040
TGAGGTTGGT CGTGGTCCTC TTGCTGGTCC TGTAGTCGCT GCGGCCGTTA TTTTATCTAA	2100

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AAATTGTAAG	ATTAAAGGTC	TCAACGACAG	CAAGAAAATT	CCTAAAAAGA	AACATCTGGA	2160
GATTTTCCAA	GCCGTTCAAG	ACCAAGCCTT	GTCGATTGGA	ATTGGTATCA	TAGATAATCA	2220
GGTCATCGAC	CAAGTCAACA	TCTATGAAGC	AACCAAATA	GCCATGCAAG	AAGCAATCTC	2280
CCAGCTCAGC	CCTCAACCAG	AGCACCTTTT	GATTGATGCC	ATGAAACTGG	ACTTGCCCAT	2340
TTCACAAACC	TCCATTATCA	AAGGAGATGC	CAACTCCCTC	TCTATCGCAG	CAGCATCTAT	2400
AGTAGCCAAG	GTAACACGTG	ATGAATTGCT	GAAAGAATAC	GATCAGCAGT	TCCCTGGCTA	2460
TGATTTTCGCT	ACTAATGCAG	GATATGGCAC	AGCTAAACAT	CTGGAAGGCC	TCACAAAAC	2520
AGGAGTTACC	CCAATTCACC	GAACCAGCTT	TGAACCCGTT	AAATCACTGG	TTTATAGGTAA	2580
AAAAGAAAGT	TAATTGAAAG	GAAATAACAT	GGAGGAACAG	TCGGAAATAG	TCCGTTCTAA	2640
GAAAGAATTC	GCCTTTGCAT	CCAGCACTAT	ACTATCCCAA	GTTGGTCGAG	GAATCATTTGT	2700
CGGCCTCATC	GTTGGAATTA	TCGTCGGATC	CTTTCGTTTC	TTAATTGAAA	AGGGCTTCCA	2760
CCTGATACAA	GGAGTTTATC	AAGATCAAGG	GTACTTAGTG	CGCAATCTTT	TTGTACTGGT	2820
TTTGTTTTAT	ATACTCATCT	GTTGGCTCAG	TGCCAAATA	ACACGGTCAG	AAAAAGATAT	2880
TAAAGGCTCA	GGAATTCCTC	AAGTCGAAGC	CGAACTGAAA	GGCCTCATGT	CCCTCAACTG	2940
GTGGGGCATT	CTTTGGAAAA	AATATGTGCT	AGGTATTCTT	GCTATTGCCA	GTGGACTCAT	3000
GCTGGGTCGA	GAGGGACCCA	GCATTCAACT	TGGAGCAGTT	GGTGGTAAAG	GAATTGCCAA	3060
GTGGCTCAAA	TCCAGTCCAG	TAGAGGAACG	TTCTTGATT	GCCAGTGGAG	CTGCAGCAGG	3120
TTTAGCCGCA	GCCTTTAATG	CTCCTATTGC	AGCACTTCTC	TTTGTTGTAG	AAGAAGTCTA	3180
TCACCATTTT	TCGCGCTTTT	TCTGGGTCTC	AACTCTAGCA	GCCAGCATCG	TAGCAAACCT	3240
TGTGTCTCTA	CTCATGTTTC	GTTTGACACC	AGTATTGGAT	ATGCCAGATA	ACATTCCCTC	3300
CATGACCCTA	GATCAGTATT	GGATATATCT	CGTCATGGGA	ATTTTCCTTG	GATTTTCAGG	3360
TTTTCTCTAT	GAGAAAGCTG	TATTAAACGT	TGGAAGAGTT	TATGACTTGA	TTGGTCAAAA	3420
AATCCATTTG	GATAGGGCTT	ATTATCCCAT	CTTGGCTTTT	ATCCTTATCA	TACCAGTCGG	3480
AATCTTCTTA	CCTCAAATCA	TTGGTGGCGG	AAATCAGCTT	GTCCTTTCTT	TAAGTGAACA	3540
AAATTTTAGT	TTCCAAGTTT	TATTAGCTTA	CTTTTAAATC	CGCTTTATTT	GGAGTATGAT	3600
TAGCTATGGA	AGTGGACTGC	CAGGAGGAAT	TTTCCTCCCC	ATTTTAGCTC	TTGGTTCTTT	3660
GCTTGGTGCC	TTAGTTGGTG	TTATCTGTGT	CAATCTTGGA	CTTGTCAGTC	AAGAGCAATT	3720
CCCTATATTT	GTCATTCTAG	GAATGAGTGG	CTATTTTGGA	GCCATATCAA	AAGCTCCCTT	3780
AACCGCTATG	ATCCTCGTAA	CTGAGATGGT	AGGAGATATT	CGCAACCTTA	TGCCACTTGG	3840
TCTTGTCACT	CTTGTTTCTT	ATATTATCAT	GGATTTGCTC	AAAGGTACGC	CAGTCTATGA	3900

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AGCCATGCTG	GAAAAAATGC	TTCCAGAAGA	AGTATCTAGC	GAAGGAGAAG	TTACACTTAT	3960
CGAAATACCA	GTTTCTGATA	AAATTGCTGG	GAAACAAGTT	CATGAACTCA	ACTTACCACA	4020
CAACGTCCTC	ATCACAACTC	AAGTCCATAA	TGGCAAGAGC	CAAACAGTTA	ACGGCTCAAC	4080
CAGAATGTAT	CTGGGTGATA	TGATTCACCT	GGTTATTCCA	AAAAGTGAAA	TTGGAAAAGT	4140
CAAAGATTTG	TTGTTGTAGT	ATGAGTATTT	ACATAATTTA	TGTTATGTAA	ATGATCAGTT	4200
TGATTTATTT	AGAAAACCGA	TTCTCAGGAA	TGAGATCGGT	TATTTTTTAC	TGATGAGGAA	4260
TTTTACATAT	AAATAATTGA	ACTTTATTAA	AAATAAGACT	ATAATTAAGT	TAGAAATGAT	4320
AAAGTATAAA	GCTAGAAAGG	AGTTTACTGT	ATCAAATCTG	TACAGTAAGA	TTAAAATCAT	4380
GAAAAAGAAA	ACAATAGCAA	TTATATAGAG	AAATGAAATA	GAAATAGGAT	AAAACAATCA	4440
GGACAATCAA	ATCAATTTCT	AGCAATGTTT	TAGAAGTCCA	GATGTACTAT	TCTAGTTTCA	4500
ATCTATTATA	CAATGTGTTT	TGTATCTCAT	AGCTCCTTAT	ATAGCTCTTC	AGTTATGTAG	4560
TATTAACAGA	AGTTTAGTGG	GTGAGATTTT	TATTATTTTC	CTTATTCTGT	TTTGTTTGTA	4620
GGTCTAAGTC	TTTTTATCAC	TTTGAAAAAC	TCCTATAACA	TCTTTCCGAA	AAACTATAAT	4680
TTTCTTGAAA	AATATACAAG	TCTATGCTAT	ACTACTAGTA	TACTTACTTA	TGGAGAAAAT	4740
ACATGAAACG	TGAGATTTTA	CTGGAACGAA	TCGACAAACT	AAAACAACCTC	ATGCCCTGGT	4800
AAGTTCTGGA	ATACTACCAA					4820

(2) INFORMATION FOR SEQ ID NO: 20:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21338 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

CTACGACATC	ATGATTAACA	GTCATGCGCT	ACTACCAACT	GAGCTATGGC	GGATAAAATA	60
GTCCGTACGG	GATTCGAACC	CGTGTTACCG	CCGTGAAAAG	GCGGTGTCTT	AACCCCTTGA	120
CCAACGGACC	TTCTATCTGT	AGCAGATATA	ACCATTATAT	CAATTTCTTG	CTAATTGTCA	180
ATCACTTTTG	AGATTTTTTC	TCTAAAATAT	CTTTTAATTT	TCTAATTTTT	AATCTTGAAA	240
TAGGACAACG	ATGGTCTTCA	TAGAAAACAA	TTTCTAAGTT	TTTTCGATCA	ATTTCTCTGA	300
TATTACCTAT	ATTTACCAA	AATGACTTGT	GAGGAGAATA	AAATCGCTGA	GTATGTTTGT	360
CCTTTTCCTG	AATATCTGTC	ATGGTACCAT	AAAACCTCTT	TGCAAAATTC	TTACCAATAA	420

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TGCGCAATTT ATGAGATACC CCTGTTGTTT CAATATACAA AATATCATGG TAAGGAATTT	480
TTAAATCATT TCCCTTGTA TGTAGTCGA AATAATCTAC AACATCTTCA TTTTCAAGTA	540
ACATACTCTT CGTGTAGAAG ATATTTTGCT CAATTCTCTT CTAAACATC TCATCATTGA	600
TATCCTTATC AACAAAATCT AGGGCTGATA CCTGGTATTT ATAGGTTAGA GTCGCAAACT	660
CTGATCGACT AGTGATAAAG ACGATAATAG CGTAAGGATT GTAATGACGA ATGAGCTGAG	720
CCACTTCAAA TCCCTTTTTC TCAATTCCAT GAATATCGAT ATCTAGGAAA TAAAGCTGAT	780
TTACTTCATC ATTTTCAATG TATTCTTCAA ATTCACGGAC TTTTCCCGTT GTCTTGATG	840
ATATTGGAAT ATTCGATTCT TTCGAAATTT CATCCAATAT TCTCTCTAGT CTCACTTGAT	900
GTTCAATAAC ATCTTCTAAA ATTAAACTT TCATTCAAAT TCCCTCTTAA ATCTAATGAT	960
TTGTCTAAAT GACTGCCTT CCATCTCTGT TTCTAAAATA ATATTGTTGT ACTTATCTAG	1020
TAGTTCTTTC ACATTATTTA ATCCGACTCC GCGATTTCTT CCCTTAGTGG AGAATCCTAA	1080
GGCAAATAGA TCTCCTGAAG GAGTCATCGT CATTTTACAT GAATTCTGAA TCACAATAAC	1140
TGTTTCAGTT TCCATCTTAA TAACTGCTAC TTCCATCTGC TTTTATAGC TATCAGCCGA	1200
TCCTTCGACA GCATTATTCA ATAAAACGCT CATGATACGA ACCAAATCCA ATAGTTCAAT	1260
TGGAAGCTTG GTAATCGTAT CTTTACTTTC CAGTGTAAC TCTACACCAT TATTTGAGC	1320
ATAGACAATT GACTGAGCAA CCAAACCTCG TAAAGCTGAG TCTTCTATGT TGTTCAAATC	1380
AAAGTAAGTG TACTTATCTG AACGCAATTT ATGATTTGCT TTGACTAAAA CTTCAATTGTA	1440
AATTCTGTCA ATTTCTGTGTA AATTACCACT GTCAATTGCC ATCTGCATGC TGACAAGCAT	1500
TCCAGCATAA TCATGTCGAA AACCACGGAT TTCATTATAC AGACCAACAA TTTTCTCTGT	1560
GTAATTCTGT AAATGTTTCT GTTCAAATTT CTTCTGCTTC AAAGCAATCT CTTTCTCCAT	1620
TTGAACTTTA TGAGAAATCA TTGCAAAGAA GGTCAAAAGG AGAGAGATAA AGACAATAGA	1680
TGACAAAATA CTTCCAAAAC TATTCAAATG TTTAATCGTA CTTACCATAT CTGAAACGAA	1740
AGATACAATA TGTAGCAATA GTAAAGCAAA AAATACTTTT TTCAAGAAAG GATAAAGGTA	1800
GTCCTTGTC AATAGGCTA GTTCCAAATG GAAATAGTAA ATGATTTTTA ATGTAACAAA	1860
ATAGGTTAAC ACCGTCACAA CGAAAAAGAA TGGGAAATGA TATTGTAAAA CAAAATTATC	1920
TCCTGTTATA GAGGAGAAAA TTACGGACAG AAAGTTATGA GTGCTCTCAT ATAAAAGAGA	1980
TAGTAGTAAA CTTAGGAATA GTCCTCTATC CCTCTCATAC TGTTTCATCC ATCGAAAATA	2040
GGAATATAAG CCCAAAGGAA ATAAAAATCT TTCAATCCCT ATTTTATCTA AATATAGAAG	2100
ATAAAAGGAA AATTCAAGTA CTATTTCACT TAGTAATGTA TAAGCACCAA AAACGTATAA	2160
TTCTTTTCTA TTTATTCGAC CTTTACAAAT TAAACGGTAA CTGTGACTAA TAATTAAAAA	2220

ATGAACAATA	ACTGTCCCAA	ATCCAAGTAA	ATCCATTACT	CTTCTCCTT	ATTCATTAC	2280
TTTTTTCGTA	GGAAAAGAAA	ATCAAGGATG	ATTCTTGAAA	TCCTCATCTC	CCCACCTTTA	2340
ATCTTTTGTA	AGTCTTTTTC	CTTCAAAGCT	ACAAACTGTT	CCAATTTAAC	TGTGTTTTTC	2400
ATAATAAAAT	CTCCTAAAAT	GTTTTTCTT	GTAAGCTAAC	TTACAAAAAC	CATTATACAA	2460
AATGGAATTT	CGTTTTAGAT	AAAATTCTCT	CAACTGTCAT	TTTTTCTCTC	CAAAGTGAC	2520
TTTTTTAAGA	AAAAAGCCGG	GAAAATTCCC	AGCTTTGCTA	TTATATTGAT	CCCAGCAGGA	2580
TTCGAACCTG	CGACCGTTCG	CTTAGAAGGC	GAATGCTCTA	TCCAGCTGAG	CTATGAGACC	2640
TAATACAATT	ATTCTACCAA	AAATTCAATT	AAAAGTCAAT	TTTCTATTTA	TGGTAGGGGA	2700
ATCCCTGCTG	AATCGTAAAA	GCGCGATAGA	TTTGTTCAAC	AAGAACTAGT	CTCATTAAC	2760
GATGGGGTAA	GGTTAGGCGA	CCAAAAGTGA	CAGAAAGATT	GGCTCTATTT	TTTACAGATG	2820
ATGATAATCC	TAAACTTCCC	CCAATAATAA	AAGTAAGAGT	AGAAAATCCT	TTTATAGAAG	2880
TTTCTTCTAA	CTGCTTACTA	AATTCTTCTG	AGAAGAAAGT	TTTCCCTTCA	ATGGCTAACA	2940
CAATAACGAA	ATCACGGTCA	GCAATTTTTG	ATAAAATTCT	CTGACCTTCT	ATTTCTAAAA	3000
TCTTTTGATT	TTCTGATTCA	CTGGCCTTAT	CTGGTGTTTT	TTCATCTGAT	AACTCAATCA	3060
TTTCAAACCT	AGCAAATCTA	GAAATTCGTT	TTGAATACTC	TGCGATACCA	TCTTTTAAAT	3120
ACTTTTCTTT	CAGTTTCCCA	ACTGTTACAA	CTTTAATTTT	CATGACTCTA	TTCTAACATA	3180
TTCTCTATTT	TTTCACATCT	TATTCACAAA	ATAAAAAATA	GATTTCAATT	AAGAAAATCA	3240
CAATTTCAAA	AGAGTTATCC	ACAGTTTGTG	TAAAACTTTT	GTGTTTAAGT	TATAATTAAG	3300
CTAGTCAGTT	TATACTTTCA	GTAATTCAAA	CATATGGAGG	CAAATATGAA	ACATCTAAAA	3360
ACATTTTACA	AAAAATGGTT	TCAATTATTA	GTCGTTATCG	TCATTAGCTT	TTTTAGTGGA	3420
GCCTTGGGTA	GTTTTTCAAT	AACTCAACTA	ACTCAAAAAA	GTAGTGTAAG	CAACTCTAAC	3480
AACAATAGTA	CTATTACACA	AACTGCCTAT	AAGAACGAAA	ATTCAACAAC	ACAGGCTGTT	3540
AACAAAGTAA	AAGATGCTGT	TGTTTCTGTT	ATTACTTATT	CGGCAAACAG	ACAAAATAGC	3600
GTATTTGGCA	ATGATGATAC	TGACACAGAT	TCTCAGCGAA	TCTCTAGTGA	AGGATCTGGA	3660
GTTATTTATA	AAAAGAATGA	TAAAGAAGCT	TACATCGTCA	CCAACAATCA	CGTTATTAAT	3720
GGCGCCAgCA	AAGTAGATAT	TCGATTGTCA	GATGGGACTA	AAGTACCTGG	AGAAATTGTC	3780
GGAGCTGACA	CTTTCTCTGA	TATTGCTGTC	GTCAAAATCT	CTTCAGAAAA	AGTGACAACA	3840
GTAGCTGAGT	TTGGTGATTC	TAGTAAGTTA	ACTGTAGGAG	AAACTGCTAT	TGCCATCGGT	3900
AGCCCGTTAG	GTTCTGAATA	TGCAAATACT	GTCACTCAAG	GTATCGTATC	CAGTCTCAAT	3960

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AGAAATGTAT	CCTTAAAATC	GGAAGATGGA	CAAGCTATTT	CTACAAAAGC	CATCCAAACT	4020
GATACTGCTA	TTAACCCAGG	TAACCTCTGGC	GGCCCACTGA	TCAATATTCA	AGGGCAGGTT	4080
ATCGGAATTA	CCTCAAGTAA	AATTGCTACA	AATGGAGGAA	CATCTGTAGA	AGGTCTTGGT	4140
TTCGCAATTC	CTGCAAATGA	TGCTATCAAT	ATTATTGAAC	AGTTAGAAAA	AAACGGAAAA	4200
GTGACGCGTC	CAGCTTTGGG	AATCCAGATG	GTAAATTTAT	CTAATGTGAG	TACAAGCGAC	4260
ATCAGAAGAC	TCAATATTCC	AAGTAATGTT	ACATCTGGTG	TAATTGTTCTG	TTCGGTACAA	4320
AGTAATATGC	CTGCCAATGG	TCACCTTGAA	AAATACGATG	TAATTACAAA	AGTAGATGAC	4380
AAAGAGATTG	CTTCATCAAC	AGACTTACAA	AGTGCTCTTT	ACAACCATTC	TATCGGAGAC	4440
ACCATTAAGA	TAACCTACTA	TCGTAACGGG	AAAGAAGAAA	CTACCTCTAT	CAAACCTAAC	4500
AAGAGTTCAG	GTGATTTAGA	ATCTTAATTG	ACATCTATGT	AAAGAAAGCT	TTACATAAGA	4560
GAAAAGATGT	GTTAGTGTAG	AATCATGGAA	AAATTTGAAA	TGATTTCTAT	CACAGATATA	4620
CAAAAAAATC	CCTATCAACC	CCGAAAAGAA	TTTGATAGAG	AAAAACTAGA	TGAACTAGCA	4680
CAGTCTATCA	AAGAAAATGG	GGTCATTCAA	CCGATTATTG	TTCGTCAATC	TCCTGTTATT	4740
GGTTATGAAA	TCCTTGCAGG	AGAGAGACGC	TATCGGGCTT	CACTTTTAGC	TGGTCTACGG	4800
TCTATCCCAG	CTGTTGTTAA	ACAGATTTCA	GACCAAGAGA	TGATGGTCCA	GTCCATTATT	4860
GAAAATTTAC	AGAGAGAAAA	TTTAAACCCA	ATAGAAGAAG	CACGCGCCTA	TGAATCTCTC	4920
GTAGAGAAAG	GATTCACCCA	TGCTGAAATT	GCAGATAAGA	TGGGCAAGTC	TCGTCCATAT	4980
ATCAGCAACT	CCATTCGTTT	ACTTTCCTTG	CCAGAACAGA	TTCTTTCAGA	AGTAGAAAAT	5040
GGCAAACCTAT	CACAAGCCCA	TGCGCGTTCC	CTAGTTGGGT	TAAATAAGGA	ACAACAAGAC	5100
TATTTCTTTC	AACGGATTAT	AGAAGAAGAT	ATTTCTGTAA	GGAAATTAGA	AGCTCTTCTG	5160
ACAGAGAAAA	AACAAAAGAA	ACAGCAAAAA	ACTAATCATT	TCATACAAAA	TGAAGAAAAA	5220
CAGTTAAGAA	AACTACTCGG	ATTAGATGTA	GAAATTAAAC	TATCTAAAAA	AGACAGTGGA	5280
AAAATCATT	TTCTTTTTTC	AAATCAAGAA	GAATATAGTA	GAATTATCAA	CAGCCTGAAA	5340
TAAGGCTGTT	CTTTTATTTT	TTTATCTCAC	AAGGTTATCC	ACTATGTTTT	TCGATAAAAA	5400
GCTTAATAAA	TCAATAATTT	CTTCTTTTAT	CCCCAACCTG	TGGATAAAGT	TTGGTAACAT	5460
TGTGGATTAT	TTTTCACAGC	TTGTGGAAAA	TTCTTGCTAT	CTATGGTAAA	ATATCTCTAG	5520
TATTAACTT	TTAAATAGTA	AAGGAGGAGA	AAGGATTGAA	AGAAAAACAA	TTTTGGAATC	5580
GTATATTAGA	ATTTGCACAA	GAAAGACTGA	CTCGATCCAT	GTATGATTTT	TATGCTATTC	5640
AAGCTGAACT	CATCAAGGTA	GAGGAAAATG	TTGCCACTAT	ATTTCTACCT	CGCTCTGAAA	5700
TGGAAATGGT	CTGGGAAAAA	CAACTAAAAG	ATATTATTGT	AGTAGCTGGT	TTTGAAATTT	5760

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ATGACGCTGA AATAACTCCC CACTATATTT TCACCAAACC TCAAGATACG ACTAGCTCAC	5820
AAGTTGAAGA AGCTACAAAT TTAACCTCTTT ATAACTATAG TCCAAAGTTA GTATCTATTC	5880
CTTATTCAGA TACGGGATTA AAAGAAAAGT ATACCTTTGA TAACTTTATT CAAGGGGATG	5940
GAAATGTTTG GGCTGTATCA GCCGCTTTAG CTGTCTCTGA AGATTTGGCT CTGACCTATA	6000
ACCCTCTTTT TATCTATGGA GGACCAGGCC TTGGTAAGAC TCACTTATTA AACGCTATTG	6060
GAAATGAAAT TCTAAAAAAT ATTCCTAATG CGCGTGTTAA ATATATCCCT GCCGAAAGCT	6120
TTATTAATGA CTTTCTTGAT CACCTAAGAC TTGGGGAAAT GGAAAAGTTT AAAAAGACCT	6180
ATCGTAGTCT TGATCTTTTG TTAATCGATG ATATCCAGTC ACTCAGCGGA AAAAAGTCG	6240
CAACTCAGGA AGAATTTTTC AATACCTTTA ACGCCCTTCA TGACAAGCAA AAACAGATTG	6300
TCCTAACGAG TGATCGTAGT CCAAAACATC TAGAAGGGCT CGAGGAGAGG CTTGTCACGC	6360
GTTTTAGTTG GGGATTGACA CAAACTATCA CCCCCCTGA CTTTGAAACA CGTATTGCCA	6420
TTTTACAAAG TAAGACGGAA CATTTAGGCT ACAATTTCCA AAGTGATACT CTAGAATACC	6480
TAGCTGGGCA ATTTGATTCA AATGTTGAG ATCTTGAGGG AGCCATCAAC GACATCACTT	6540
TAATTGCCAG AGTAAAAAAA ATCAAGGATA TCACTATTGA TATTGCTGCA GAAGCCATTA	6600
GAGCCCGCAA ACAAGATGTT AGCCAAATGC TCGTCATCCC AATTGATAAA ATCCAAACTG	6660
AAGTTGGTAA CTTTTATGGT GTTAGTATCA AAGAAATGAA GGGAAGTAGA CGCCTTCAAA	6720
ATATTGTTTT GGCCCGTCAA GTAGCCATGT ATTTATCTAG AGAACTAACA GATAATAGTC	6780
TTCCAAAAAT TGGGAAGGAA TTTGGGGGAA AAGATCATAC CACAGTCATT CATGCCCATG	6840
CCAAAATAAA ATCTTTGATT GATCAAGACG ATAATTTACG TTTAGAAATT GAATCAATCA	6900
AAAAGAAAAT CAAATAATTT GTGGATAACT TTTAGTTTTT TATCTTTTTT ATCCACATTT	6960
TTTAAACAAG CTAAAAAACT TGATATGACT TGTTTAAAGG CTGTTTTCCA CAGATTTTAC	7020
AGACTCTATT ATTACTATTA TCTTTCTAAT ACTAAAAATA AATAAAGGAG AATCCATGAT	7080
TCATTTTTCA ATTAATAAAA ATTTATTTCT ACAAGCATTA AATACTACTA AGAGAGCTAT	7140
TAGTTCTAAA AATGCCATTC CTATTTTATC AACAGTAAAA ATTGACGTGA CCAATGAAGG	7200
TATTACTTTA ATTGGTTCAA ATGGTCAAAT TTCAATTGAA AATTTTATTT CTCAAAAAAA	7260
TGAAGATGCT GGTTCGTTAA TTAATTCTTT AGGTTTCGATC CTTCTTGAAG CTTCTTTCTT	7320
TATCAATGTA GTATCTAGTT TACCTGATGT AACTCTTGAT TTAAAGAAA TTGAACAAAA	7380
TCAAATTGTT TTAACCAGTG GCAAATCAGA AATTACCCTA AAAGGAAAAG ATAGCGAACA	7440
ATATCCACGA ATCCAAGAAA TTTCAGCAAG CACTCCTTTA ATACTTGAAA CAAAATTACT	7500

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CAAGAAAATT	ATTAATGAAA	CAGCCTTTGC	TGCAAGTACA	CAAGAGAGTC	GTCCGATTTT	7560
AACAGGTGTC	CACTTCGTAT	TGAGTCAACA	CAAAGAGTTA	AAAACAGTTG	CAACAGACTC	7620
TCATCGCCTA	AGCCAGAAAA	AATTGACTCT	TGAAAAAAT	AGTGATGATT	TTGATGTCGT	7680
AATTCCTAGC	CGTTCTCTAC	GCGAATTTTC	AGCGGTATTT	ACAGATGATA	TCGAAACTGT	7740
AGAGATTTTC	TTTGCCAATA	ACCAAATCCT	CTTTAGAAGC	GAAAATATTA	GCTTCTATAC	7800
TCGTCTCCTA	GAAGGAAACT	ATCCTGATAC	AGATCGCTTG	ATTCCAACAG	ACTTTAACAC	7860
TACTATTACT	TTTAATGTGG	TAAACTTACG	CCAGTCAATG	GAGCGTGCCC	GTCTTTTATC	7920
AAGTGCGACT	CAAAATGGTA	CTGTGAAACT	TGAAATTAAG	GATGGGGTTG	TTAGCGCCCA	7980
TGTTCACTCT	CCAGAAGTTG	GTAAAGTAAA	CGAAGAAATC	GATACTGATC	AGGTTACTGG	8040
TGAAGATTTG	ACCATTAGTT	TCAACCCAAC	TTACTTGATT	GATTCTCTTA	AAGCTTTAAA	8100
TAGCGAAAAG	GTGACTATTA	GCTTTATCTC	AGCTGTTTCG	CCATTTACTC	TTGTGCCAGC	8160
AGATACTGAC	GAAGACTTCA	TGCAGCTCAT	TACACCAGTT	CGTACAAATT	AAGTGAAAGA	8220
GGTTGAGCCT	GGCTCGCCTC	TTTTATGATA	TAATCGAAAA	AGAAAAGGAG	AGTAGTATGT	8280
ATCAAGTTGG	AAATTTTGTT	GAGATGAAAA	AATCACACGC	TTGTACAATC	AAGTCGACTG	8340
GTAAAAAGGC	TAATCGTTGG	GAAATTACAC	GTGTAGGAGC	AGATATCAAA	ATAAAATGTA	8400
GTAATTGTGA	GCATGTTGTC	ATGATGGGGC	GATATGATTT	TGAGCGAAAA	ATGAATAAAA	8460
TTATTGACTG	AGAACCCTTA	GTTAGAGGGT	TAGCACTTTA	TCCCTTTTTG	TGTTATAATA	8520
TTAGGGATTG	AAATGAAAAC	GGAGAATGAG	AAATATGGCT	TTGACAGCAG	GTATCGTTGG	8580
TTTGCCAAAC	GTTGGTAAAT	CAACACTATT	TAATGCAATT	ACAAAAGCAG	GAGCAGAGGC	8640
AGCAAACACTAC	CCATTTGCGA	CGATTGATCC	AAATGTTGGA	ATGGTGGAAG	TTCCAGATGA	8700
ACGCCTACAA	AAACTAACTG	AAATGATAAC	TCCTAAAAAG	ACAGTTCCCA	CAACATTTGA	8760
ATTTACAGAT	ATTGCAGGGA	TTGTAAAAGG	AGCTTCAAAA	GGAGAGGGGC	TAGGGAATAA	8820
ATTCTTGGCC	AATATTCGTG	AAGTAGATGC	GATTGTTTAC	GTAGTTCGTG	CTTTTGATGA	8880
TGAAAATGTA	ATGCGCGAGC	AAGGACGTGA	AGACGCCTTT	GTAGATCCAC	TTGCAGATAT	8940
TGATACCATT	AATCTGGAAT	TGATTCTTGC	TGACTTAGAA	TCAGTGAACA	AACGATATGC	9000
GCGTGTAGAA	AAGATGGCAC	GTACGCAAAA	AGATAAAGAA	TCAGTAGCAG	AATTCAATGT	9060
TCTTCAAAAG	ATTAAACCAG	TCCTAGAAGA	CGGGAAATCA	GCTCGTACCA	TTGAATTTAC	9120
AGATGAGGAA	CAAAAGGTTG	TCAAAGGTCT	TTTCCTTTTG	ACGACTAAAC	CAGTTCTTTA	9180
TGTAGCTAAT	GTGGACGAGG	ATGTGGTTTC	AGAACCTGAC	TCTATCGACT	ATGTCAAACA	9240
AATTCGTGAA	TTTGCAGCGA	CAGAAAATGC	TGAAGTAGTC	GTTATTTCTG	CGCGTGCTGA	9300

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GGAAGAAATT	TCTGAATTGA	ATGATGAAGA	TAAAAAAGAG	TTTCTTGAAG	CCATTGGTTT	9360
GACAGAATCA	GGTGTAGATA	AGTTGACGCG	TGCAGCTTAC	CACCTGCTTG	GATTGGGAAC	9420
TTACTTCACA	GCTGGTGAAA	AAGAAGTTCG	CGCTTGGA CT	TTCAAACGTG	GTATGAAGGC	9480
TCCTCAAGCA	GCTGGTATTA	TCCACTCAGA	CTTTGAAAAA	GGCTTTATTC	GTGCAGTAAC	9540
CATGTCATAT	GAAGATCTAG	TGAAATACGG	ATCTGAAAAG	GCCGTAAAAG	AAGCTGGACG	9600
CTTGCGTGAA	GAAGGAAAAG	AATATATCGT	TCAAGATGGC	GATATCATGG	AATCCGCTT	9660
TAATGTCTAA	AAATTAATAA	ATGGTGTCAA	TTAGGTTGGA	AAAAAATTCC	AACCCTTTTG	9720
GCTTTTGAAA	GGAAAAATAA	ATGACCAAAT	TACTTGTAGG	CTTGGGAAAT	CCAGGGGATA	9780
AATATTTTGA	AACAAAACAC	AATGTTGGTT	TTATGTTGAT	TGATCAACTA	GCGAAGAAAC	9840
AGAATGTCAC	TTTTACACAC	GATAAGATAT	TTCAAGCTGA	CCTAGCATCC	TTTTTCCTAA	9900
ATGGAGAAAA	AATTTATCTG	GTAAACCAA	CGACCTTTAT	GAATGAAAGT	GGAAAAGCAG	9960
TTCATGCTTT	ATTAACCTAC	TATGGTTTGG	ATATTGACGA	TTTACTTATC	ATTTACGATG	10020
ATCTTGACAT	GGAAGTTGGG	AAAATTCGTT	TAAGAGCAAA	AGGCTCAGCA	GGTGGTCATA	10080
ATGGTATCAA	GTCTATTATT	CAACATATAG	GAACCTCAGG	CTTTAACCGT	GTTAAGATTG	10140
GAATTGGAAG	ACCTAAAAAT	GGTATGTCAG	TTGTTTCATCA	TGTTTTGAGT	AAGTTTGACA	10200
GGGATGATTA	TATCGGTATT	TTACAGTCTG	TTGACAAAGT	TGACGATTCT	GTAAACTACT	10260
ATTTACAAGA	GAAAAATTTT	GAGAAAACAA	TGCAGAGGTA	TAACGGATAA	ATGGTGACCT	10320
TATTAGATTT	ATTCTCAGAA	AATGATCAGA	TTAAAAAATG	GCATCAAAAT	TTAACAGATA	10380
AGAAAAGACA	ACTAATACTT	GGTTTATCAA	CATCTACTAA	GGCTCTTGCA	ATTGCAAGCA	10440
GTTTAGAAAA	AGAAGATAGG	ATTGTGTTAT	TGACGTCAAC	TTATGGAGAA	GCAGAAGGAC	10500
TTGTTAGTGA	TCTTATTTCT	ATCTTGGGTG	AGGAACTCGT	CTATCCATTT	TTGGTAGATG	10560
ATGCTCCTAT	GGTGGAGTTT	TTGATGTCTT	CACAGGAAAA	AATTATTTCA	CGGGTTGAAG	10620
CCTTGCGTTT	TTTGACTGAT	TCATCTAAGA	AAGGGATTTT	AGTTTGTAAT	ATCGCAGCAA	10680
GTCGATTGAT	TTTACCGTCT	CCCAATGCAT	TCAAAGATAG	TATTGTAAAA	ATCTCAGTTG	10740
GTGAAGAATA	TGATCAACAC	GCGTTTATCC	ATCAGTTAAA	GGAAAATGGC	TATCGAAAAG	10800
TTACTCAAGT	ACAAACTCAG	GGCGAATTTA	GTCTTCGAGG	AGATATTTTA	GATATTTTTG	10860
AAATATCCCA	GTTAGAACCT	TGTCGAATTG	AGTTTTTTTG	TGATGAAATT	GATGGTATCA	10920
GGTCATTTGA	AGTAGAAACA	CAATTATCGA	AAGAAAATAA	GACAGAACTC	ACTATCTTTC	10980
CAGCTAGTGA	TATGCTTTTG	AGAGAAAAGG	ATTATCAACG	AGGACAGTCA	GCTTTAGAAA	11040

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AACAAATTC	AAAACTTTA	TCACCTATTT	TGAAATCATA	CCTAGAAGAA	ATTCTTTCAA	11100
GTTTTACCA	AAAACAAAGT	CATGCAGACT	CTCGGAAGTT	TTTATCTTTG	TGCTATGATA	11160
AGACATGGAC	TGTCTTTGAT	TATATTGAAA	AAGATACTCC	AATATTCTTT	GATGATTATC	11220
AAAAATTGAT	GAATCAGTAT	GAAGTCTTTG	AAAGAGACTT	AGCGCAGTAC	TTTACAGAAG	11280
AATTACAGAA	TAGTAAAGCA	TTTTCTGATA	TGCAGTATTT	TTCTGATATT	GAACAAATCT	11340
ATAAAAAACA	AAGTCCAGTG	ACCTTTTTCT	CTAATCTTCA	AAAGGGTTTA	GGAAATCTCA	11400
AATTTGACAA	AATTTATCAA	TTCAATCAAT	ATCCTATGCA	GGAATTTTTC	AATCAGTTTT	11460
CTTTTCTAAA	AGAAGAAAT	GAACGATATA	AAAAATGGA	TTACACCATT	ATTCTGCAGT	11520
CTAGCAATTC	AATGGGAAGT	AAAACATTGG	AGGATATGTT	AGAGGAATAT	CAGATTAAAT	11580
TGGATTCTAG	AGATAAGACA	AATATCTGTA	AAGAATCTGT	AACTTAATA	GAGGGTAATC	11640
TCAGACATGG	TTTTCATTTT	GTAGATGAAA	AGATTTTATT	GATAACTGAA	CATGAGATTT	11700
TTCAAAAGAA	ATTAAAGCGT	CGTTTTTCGAA	GACAACATGT	TTCAAATGCA	GAGAGATTAA	11760
AAGATTACAA	TGAACTTGAA	AAAGGGGACT	ATGTTGTCCA	TCATATCCAT	GGGATTGGTC	11820
AATATCTAGG	AATTGAAACC	ATTGAAATCA	AGGGAATTCA	TCGCGATTAT	GTCAGTGTCC	11880
AATACCAAAA	TGGTGATCAA	ATTTCTATCC	CCGTGGAACA	GATTCATCTA	CTGTCCAAAT	11940
ATATTTCAAG	TGATGGTAAA	GCTCCAAAAC	TCAATAAATT	AAATGACGGT	CATTTTAAAA	12000
AGGCCAAGCA	AAAGGTAAAG	AACCAGGTAG	AGGATATAGC	TGATGATTTA	ATCAAACCTCT	12060
ACTCTGAACG	TAGTCAGTTG	AAGGGTTTTG	CTTTCTCAGC	TGATGATGAT	GATCAAGATG	12120
CCTTTGATGA	TGCTTTCCTT	TATGTTGAAA	CGGATGATCA	ACTTCGTAGT	ATTGAGGAAA	12180
TCAAGAGGGA	TATGCAGGCT	TCTCAGCCAA	TGGATCGACT	TTTAGTTGGG	GATGTTGGTT	12240
TTGGAAAGAC	TGAAGTTGCT	ATGCGTGCAG	CCTTTAAAGC	AGTCAATGAT	CACAAACAGG	12300
TTGTCATTCT	AGTTCCGACG	ACGGTTTTAG	CGCAACAGCA	CTATACGAAT	TTTAAGGAAC	12360
GATTCCAAAA	TTTTGCAGTT	AATATTGATG	TGTTGAGTCG	CTTTAGAAGT	AAAAAAGAGC	12420
AGACTGCAAC	ACTTGAAAAA	TTGAAAAACG	GTCAAGTCGA	TATTTTGATT	GGAACACATC	12480
GTGTTTTGTC	AAAAGATGTT	GTGTTTGCTG	ATTTGGGCTT	GATGATTATT	GATGAGGAAC	12540
AGCGATTTGG	TGTCAAGCAT	AAGGAACTT	TGAAAGAACT	GAAGAAACAA	GTGGATGTCC	12600
TAACCTTGAC	CGCTACGCCA	ATCCCTCGTA	CCCTCCATAT	GTCTATGCTG	GGAATCAGAG	12660
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AAAAGAATGA	TAGTGTCATT	CGTGATGCTG	TCTTGCGTGA	AATGGAGCGT	GGAGGTCAAG	12780
TTTATTATCT	TTACAACAAA	GTTGACACAA	TTGTTTCAGAA	GGTTTCAGAA	TTACAGGAGT	12840

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TGATTCCGGA	GGCTTCGATT	GGATATGTTT	ATGGTCGAAT	GAGTGAAGTC	CAGTTGGAAA	12900
ATACTCTATT	AGACTTTTATT	GAGGGACAAT	ACGATATCTT	GGTGACGACT	ACTATTATTG	12960
AGACAGGGGT	GGACATTCCA	AATGCTAATA	CTTTATTTAT	TGAAAATGCG	GACCATATGG	13020
GCTTGTC AAC	CTTATATCAG	TTAAGAGGAA	GAGTCGGTCG	TAGTAATCGT	ATTGCTTATG	13080
CTTATCTCAT	GTATCGTCCA	GAAAAATCAA	TCAGTGAAGT	CTCTGAAAAG	AGATTAGAAG	13140
CGATTAAAGG	ATTTACAGAA	TTGGGCTCTG	GCTTTAAGAT	TGCAATGCGA	GATCTTTCGA	13200
TTCGTGGAGC	AGGAAATCTT	TTAGGAAAAT	CCCAGTCTGG	TTTCATTGAT	TCTGTTGGTT	13260
TTGAATTGTA	TTGCGAGTTA	TTAGAGGAAG	CTATTGCTAA	ACGAAACGGT	AATGCTAACG	13320
CTAACACAAG	AACCAAAGGG	AATGCTGAGT	TGATTTTGCA	AATTGATGCC	TATCTTCCTG	13380
ATACTTATAT	TTCTGATCAA	CGACATAAGA	TTGAAATTTA	CAAGAAAATT	CGTCAAATTG	13440
ACAACCGTGT	CAATTATGAA	GAGTTACAAG	AGGAGTTGAT	AGACCGTTTT	GGAGAATACC	13500
CAGATGTAGT	AGCCTATCTG	TTAGAGATTG	GTTTGGTCAA	ATCATACTTG	GACAAGGTCT	13560
TTGTTCAACG	TGTGGAAAGA	AAAGATAATA	AAATTACAAT	TCAATTTGAA	AAAGTCACTC	13620
AACGACTGTT	TTTAGCTCAA	GATTATTTTA	AAGCTTTATC	CGTAACGAAC	TTAAAAGCAG	13680
GCATCGCTGA	GAATAAGGGA	TTAATGGAGC	TTGTATTTGA	TGTCCAAAAT	AAGAAAGATT	13740
ATGAAATTTT	AGAAGGTTTG	CTGATTTTTG	GAGAAAGTTT	ATTAGAGATA	AAAGAGTCTA	13800
AGGAAGAAAA	TTCCATTTGA	TATTTTCTT	CTATAAAATA	GATAAAAATG	GTACAATAAT	13860
AAATTGAGGT	AATAAGGATG	AGATTAGATA	AATATTTAAA	AGTATCGCGA	ATTATCAAGC	13920
GTCGTACAGT	CGCAAAGGAA	GTAGCAGATA	AAGGTAGAAT	CAAGGTTAAT	GGAATCTTGG	13980
CCAAAAGTTC	AACGGACTTG	AAAGTTAATG	ACCAAGTTGA	AATTCGCTTT	GGCAATAAGT	14040
TGCTGCTTGT	AAAAGTACTA	GAGATGAAAG	ATAGTACAAA	AAAAGAAGAT	GCAGCAGGAA	14100
TGTATGAAAT	TATCAGTGAA	ACACGGGTAG	AAGAAAATGT	CTAAAAATAT	TGTACAATTG	14160
AATAATTCTT	TTATTCAAAA	TGAATACCAA	CGTCGTCGCT	ACCTGATGAA	AGAACGACAA	14220
AAACGGAATC	GTTTTATGGG	AGGGGTATTG	ATTTTGATTA	TGCTATTATT	TATCTTGCCA	14280
ACTTTTAATT	TAGCGCAGAG	TTATCAGCAA	TTACTCCAAA	GACGTCAGCA	ATTAGCAGAC	14340
TTGCAAACCT	AGTATCAAAC	TTTGAGTGAT	GAAAAGGATA	AGGAGACAGC	ATTTGCTACC	14400
AAGTTGAAAG	ATGAAGATTA	TGCTGCTAAA	TATACACGAG	CGAAGTACTA	TTATTCTAAG	14460
TCGAGGGAAA	AAGTTTATAC	GATTCCTGAC	TTGCTTCAAA	GGTGATAAAA	TGGAAAATTT	14520
ATTAGACGTA	ATAGAGCAAT	TTTTGAGTTT	GTCAGATGAA	AAGCTGGAAG	AATTGGCTGA	14580

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TAAAAATCAA	TTATTGCGTT	TACAAGAAGA	AAAGGAAAGG	AAGAATGCGT	AAATTCTTAA	14640
TTATTTTGTT	GCTACCAAGT	TTTTTGACCA	TTTCAAAAGT	CGTTAGCACA	GAAAAAGAAG	14700
TCGTCTATAC	TTCGAAAGAA	ATTTATTACC	TTTCACAATC	TGACTTTGGT	ATTTATTTTA	14760
GAGAAAAATT	AAGTTCTCCC	ATGGTTTATG	GAGAGGTTCC	TGTTTATGCG	AATGAAGATT	14820
TAGTAGTGGA	ATCTGGGAAA	TTGACTCCCA	AAACAAGTTT	TCAAATAACC	GAGTGGCGCT	14880
TAAATAAACA	AGGAATTCCA	GTATTTAAGC	TATCAAATCA	TCAATTTATA	GCTGCGGACA	14940
AACGATTTTT	ATATGATCAA	TCAGAGGTAA	CTCCAACAAT	AAAAAAAGTA	TGGTTAGAAT	15000
CTGACTTTAA	ACTGTACAAT	AGTCCTTATG	ATTTAAAAGA	AGTGAAATCA	TCCTTATCAG	15060
CTTATTCGCA	AGTATCAATC	GACAAGACCA	TGTTTGTAGA	AGGAAGAGAA	TTTCTACATA	15120
TTGATCAGGC	TGGATGGGTA	GCTAAAGAAT	CAACTTCTGA	AGAAGATAAT	CGGATGAGTA	15180
AAGTTCAAGA	AATGTTATCT	GAAAAATATC	AGAAAGATTC	TTTCTCTATT	TATGTTAAGC	15240
AACTGACTAC	TGGAAAAGAA	GCTGGTATCA	ATCAAGATGA	AAAGATGTAT	GCAGCCAGCG	15300
TTTTGAAACT	CTCTTATCTC	TATTATACGC	AAGAAAAAAT	AAATGAGGGT	CTTTATCAGT	15360
TAGATACGAC	TGTAAAATAC	GATCTGTCAG	TCAATGATTT	TCCAGGTTCT	TATAAACCAG	15420
AGGGAAGTGG	TAGTCTTCCT	AAAAAAGAAG	ATAATAAAGA	ATATTCTTTA	AAGGATTTAA	15480
TTACGAAAGT	ATCAAAAGAA	TCTGATAATG	TAGCTCATAA	TCTATTGGGA	TATTACATTT	15540
CAAACCAATC	TGATGCCACA	TTCAAATCCA	AGATGTCTGC	CATTATGGGA	GATGATTGGG	15600
ATCCAAAAGA	AAAATTGATT	TCTTCTAAGA	TGGCCGGGAA	GTTTATGGAA	GCTATTTATA	15660
ATCAAAATGG	ATTTGTGCTA	GAGTCTTTGA	CTAAAACAGA	TTTTGATAGT	CAGCGAATTG	15720
CCAAAGGTGT	TTCTGTTHAA	GATGCTCATA	AAATTGGAGA	TGCGGATGAA	TTTAAGCATG	15780
ATACGGGTGT	TGTCTATGCA	GATTCTCCAT	TTATTCTTTC	TATTTTCACT	AAGAATTCTG	15840
ATTATGATAC	GATTTCTAAG	ATAGCCAAGG	ATGTTTATGA	GGTTCTAAAA	TGAGGGAACC	15900
AGATTTTTTA	AATCATTTTC	TCAAGAAGGG	ATATTTCAAA	AAGCATGCTA	AGGCGGTTCT	15960
AGCTCTTTCT	GGTGGATTAG	ATTCCATGTT	TCTATTTAAG	GTATTGTCTA	CTTATCAAAA	16020
AGAGTTAGAG	ATTGAATTGA	TTCTAGCTCA	TGTGAATCAT	AAGCAGAGAA	TTGAATCAGA	16080
TTGGGAAGAA	AAGGAATTAA	GGAAGTTGGC	TGCTGAAGCA	GAGCTTCCTA	TTTATATCAG	16140
CAATTTTTC	GGAGAATTTT	CAGAAGCGCG	TGCACGAAAT	TTTCGTTATG	ATTTTTTTC	16200
AGAGGTCATG	AAAAAGACAG	GTGCGACAGC	TTTAGTCACT	GCCCACCATG	CTGATGATCA	16260
GGTGGAAACG	ATTTTATATG	GCTTGATTTCG	AGGAACTCGC	TTGCGCTATC	TATCAGGAAT	16320
TAAGGAGAAG	CAAGTAGTCG	GAGAGATAGA	AATCATTCGT	CCCTTCTTGC	ATTTTCAGAA	16380

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AAAAGACTTT	CCATCAATTT	TTCAC TTTGA	AGATACATCA	AATCAGGAGA	ATCATTATTT	16440
TCGAAATCGT	ATTTCGAAATT	CTTACTTACC	AGAATTGGAA	AAAGAAAATC	CTCGATTTAG	16500
GGATGCAATC	TTAGGCATTG	GCAATGAAAT	TTTAGATTAT	GATTTGGCAA	TAGCTGAATT	16560
ATCTAACAAT	ATTAATGTGG	AAGATTTACA	GCAGTTATTT	TCTTACTCTG	AGTCTACACA	16620
AAGAGTTTTA	CTTCAAAC TT	ATCTGAATCG	TTTTCCAGAT	TTGAATCTTA	CAAAAGCTCA	16680
GTTTGCTGAA	GTTTCAGCAGA	TTTTAAAATC	TAAAAGCCAG	TATCGTCATC	CGATTAAAAA	16740
TGGCTATGAA	TTGATAAAAAG	AGTACCAACA	GTTTCAGATT	TGTAAAATCA	GTCCGCAGgC	16800
TGATGAAAAG	GAAGATGAAC	TTGTGTTACA	CTATCAAAAT	CAGGTAGCTT	ATCAAGGATA	16860
TTTATTTTCT	TTTGGACTTC	CATTAGAAGG	TGAATTAATT	CAACAAATAC	CTGTTTCACG	16920
TGAAACATCC	ATACACATTC	GTCATCGAAA	AACAGGAGAT	GTTTTGATTA	AAAATGGGCA	16980
TAGAAAAAAA	CTCAGACGTT	TATTTATTGA	TTTGAAAATC	CCTATGGAAA	AGAGAAACTC	17040
TGCTCTTATT	ATTGAGCAAT	TTGGTGAAAT	TGTCTCAATT	TTGGGAATTG	CGACCAATAA	17100
TTTGAGTAAA	AAAACGAAAA	ATGATATAAT	GAACACTGTA	CTTTATATAG	AAAAAATAGA	17160
TAGGTAAAAA	ATGTTAGAAA	ACGATATTAA	AAAAGTCCTC	GTTTCACACG	ATGAAATTAC	17220
AGAAGCAGCT	AAAAAACTAG	GTGCTCAATT	AACTAAAGAC	TATGCAGGAA	AAAATCCAAT	17280
CTTAGTTGGG	ATTTTAAAAG	GATCTATTCC	TTTTATGGCT	GAATTGGTCA	AACATATTGA	17340
TACACATATT	GAAATGGACT	TCATGATGGT	TTCTAGCTAC	CATGGTGGAA	CAGCAAGTAG	17400
TGGTGTTATC	AATATTAAAC	AAGATGTGAC	TCAAGATATC	AAAGGAAGAC	ATGTTCTATT	17460
TGTAGAAGAT	ATCATTGATA	CAGGTCAAAC	TTTGAAGAAT	TTGCGAGATA	TGTTTAAAGA	17520
AAGAGAAGCA	GCTTCTGTTA	AAATTGCAAC	CTTGTTGGAT	AAACCAGAAG	GACGTGTTGT	17580
AGAAATTGAG	GCAGACTATA	CTTGCTTTAC	TATCCCAAAT	GAGTTTGTAG	TAGGTTATGG	17640
TTTAGACTAC	AAAGAAAATT	ATCGTAATCT	TCCTTATATT	GGAGTATTGA	AAGAGGAAGT	17700
GTATTCAAAT	TAGAAAGAAT	AATCTTTAAT	GAAAAAACAA	AATAATGGTT	TAATTAAAAA	17760
TCCTTTTCTA	TGGTTATTAT	TTATCTTTTT	CCTTGTGACA	GGATTCCAGT	ATTTCTATTC	17820
TGGGAATAAC	TCAGGAGGAA	GTCAGCAAAT	CAACTATACT	GAGTTGGTAC	AAGAAATTAC	17880
CGATGGTAAT	GTAAAAGAAT	TAACTTACCA	ACCAAATGGT	AGTGTTATCG	AAGTTTCTGG	17940
TGTCTATAAA	AATCCTAAAA	CAAGTAAAGA	AGAAACAGGT	ATTCAGTTTT	TCACGCCATC	18000
TGTTACTAAG	GTAGAGAAAT	TTACCAGCAC	TATTCCTCCT	GCAGATACTA	CCGTATCAGA	18060
ATTGCAAAAA	CTTGCTACTG	ACCATAAAGC	AGAAGTAACT	GTTAAGCATG	AAAGTTCAAG	18120

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TGGTATATGG	ATTAATCTAC	TCGTATCCAT	TGTGCCATTT	GGAATTCTAT	TCTTCTTCCT	18180
ATTCTCTATG	ATGGGAAATA	TGGGAGGAGG	CAATGGCCGT	AATCCAATGA	GTTTTGGACG	18240
TAGTAAGGCT	AAAGCAGCAA	ATAAAGAAGA	TATTAAAGTA	AGATTTTCAG	ATGTTGCTGG	18300
AGCTGAGGAA	GAAAAACAAG	AACTAGTTGA	AGTTGTTGAG	TTCTTAAAAG	ATCCAAAACG	18360
ATTCACAAAA	CTTGGAGCCC	GTATTCCAGC	AGGTGTTCTT	TTGGAGGGAC	CTCCGGGGAC	18420
AGGTAAAACT	TTGCTTGCTA	AGGCAGTCGC	TGGAGAAGCA	GGTGTTCAT	TCTTTAGTAT	18480
CTCAGGTTCT	GACTTTGTAG	AAATGTTTGT	CGGAGTTGGA	GCTAGTCGTG	TTCGCTCTCT	18540
TTTTGAGGAT	GCCAAAAAAG	CAGCACCAGC	TATCATCTTT	ATCGATGAAA	TTGATGCTGT	18600
TGGACGTCAA	CGTGGAGTCG	GTCTCGGCGG	AGGTAATGAC	GAACGTGAAC	AAACCTTGAA	18660
CCAACTTTGT	ATTGAGATGG	ATGGTTTTGA	GGGAAATGAA	GGGATTATCG	TCATCGCTGC	18720
GACAAACCGT	TCAGATGTAC	TTGACCCTGC	CCTTTTGCCT	CCAGGACGTT	TTGATAGAAA	18780
AGTATTGGTT	GGTCGTCCTG	ATGTTAAAGG	TCGTGAAGCA	ATCTTGAAAG	TTCACGCTAA	18840
GAATAAGCCT	TTAGCAGAAG	ATGTTGATTT	GAAATTAGTG	GCTCAACAAA	CTCCAGGCTT	18900
TGTTGGTGCT	GATTTAGAGA	ATGTCTTGAA	TGAAGCAGCT	TTAGTTGCTG	CTCGTCGCAA	18960
TAAATCGATA	ATTGATGCTT	CAGATATTGA	TGAAGCAGAA	GATAGAGTTA	TTGCTGGACC	19020
TTCTAAGAAA	GATAAGACAG	TTTCACAAAA	AGAACGAGAA	TTGGTTGCTT	ACCATGAGGC	19080
AGGACATACC	ATTGTTGGTC	TAGTCTTGTC	GAATGCTCGC	GTTGTCCATA	AGGTTACAAT	19140
TGTACCACGC	GGCCGTGCAG	GCGGATACAT	GATTGCACTT	CCTAAAGAGG	ATCAAATGCT	19200
TCTATCTAAA	GAAGATATGA	AAGAGCAATT	GGCTGGCTTA	ATGGGTGGAC	GTGTAGCTGA	19260
AGAAATTATC	TTTAATGTCC	AAACCACAGG	AGCTTCAAAC	GACTTTGAAC	AAGCGACACA	19320
AATGGCACGT	GCAATGGTTA	CAGAGTACGG	TATGAGTGAA	AACTTGGCC	CAGTACAATA	19380
TGAAGGAAAC	CATGCTATGC	TTGGTGACA	GAGTCCTCAA	AAATCAATTT	CAGAACAAAC	19440
AGCTTATGAA	ATTGATGAAG	AGGTTTCGTT	ATTATTAAAT	GAGGCACGAA	ATAAAGCTGC	19500
TGAAATTATT	CAGTCAAATC	GTGAAACTCA	CAAGTTAATT	GCAGAAGCAT	TATTGAAATA	19560
CGAAACATTG	GATAGTACAC	AAATTAAAGC	TCTTTACGAA	ACAGGAAAGA	TGCCTGAAGC	19620
AGTAGAAGAG	GAATCTCATG	CACTATCCTA	TGATGAAGTA	AAGTCAAAAA	TGAATGACGA	19680
AAAATAACCC	TGAGAGAGGC	TGGAGCCTCT	CTTTTTTGTG	CAGTTTAGGA	GCTAAAGGGA	19740
ACAGAATGGA	GAAAATGGAA	CAAATGTGTT	TTCTAATCTG	TTAGACTGTA	TCTAGAAAGG	19800
GGAAAATTAT	GATTAAAGAA	TTGTATGAAG	AAGTCCAAGG	GACTGTGTAT	AAGTGTAGAA	19860
ATGAATATTA	CCTTCATTTA	TGGGAATTGT	CGGATTGGGA	GCAAGAAGGC	ATGCTCTGCT	19920

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TACATGAATT GATTAGTAGA GAAGAAGGAC TGGTAGACGA TATTCCACGT TTAAGGAAAT	19980
ATTTCAAGAC CAAGTTTCGA AATCGAATTT TAGACTATAT CCGTAAACAG GAAAGTCAGA	20040
AGCGTAGATA CGATAAAGAA CCCTATGAAG AAGTGGGTGA GATCAGTCAT CGTATAAGTG	20100
AGGGGGGTCT CTGGCTAGAT GATTATTATC TCTTTCATGA AACACTAAGA GATTATAGAA	20160
ACAAACAAAG TAAAGAGAAA CAAGAAGAAC TAGAACGCGT CTTAAGCAAT GAACGATTTC	20220
GAGGGCGTCA AAGAGTATTA AGAGACTTAC GCATTGTGTT TAAGGAGTTT ACTATCCGTA	20280
CCCCTAGTA AGTCATGCAA AAAAAATGAA AAAAATTAGA AAAAGTAGTT GACAAAGTTT	20340
GAAAAGGCTG TATAATAGTA AGAGTTGAAA ATAACAATC AGGTCCGTTG GTCAAGGGGT	20400
TAAGACACCG CCTTTTCACG GCGGTAACAC GGGTTCGAAT CCCGTACGGA CTATGGTATG	20460
TTGCGTCAGG ACCACTTGAT GAAAAAAGT TTAAAAAAC TTAAAAATCT TCAAAAAAGT	20520
GTTGACAAGC GAAAGCAGTT GTGATATACT AATATAGTTG TCGCTTGAGA GAAGCAAGTG	20580
ACAAAGACCT TTGAAAACG AACAAAGACGA ACCAATGTGC AGGGCGCTAC AACGTAAGTT	20640
GTAGTACTGA ACAATGAAAA AAACAATAAA TCTGTCAGTG ACAGAAATGA GTAAGAACTC	20700
AAACTTTTTTA ATGAGAGTTT GATCCTGGCT CAGGACGAAC GCTGGCGGCG TGCCTAATAC	20760
ATGCAAGTAG AACGCTGAAG GAGGAGCTTG CTTCTCTGGA TGAGTTGCGA ACGGGTGAGT	20820
AACGCGTAGG TAACCTGCCT GGTAGCGGGG GATAACTATT GGAAACGATA GCTAATACCG	20880
CATAAGAGTA GATGTTGCAT GACATTTGCT TAAAAGGTGC ACTTGCATCA CTACCAGATG	20940
GACCTGCGTT GTATTAGCTA GTTGGTGGGG TAACGGCTCA CCAAGGCGAC GATACATAGC	21000
CGACCTGAGA GGGTGATCGG CCACACTGGG ACTGAGACAC GGCCCGAGCT CCTACGGGAG	21060
GCAGCAGTAG GGAATCTTCG GCAATGGACG GAAGTCTGAC CGAGCAACGC CGCGTGAGTG	21120
AAGAAGGTTT TCGGATCGTA AAGCTCTGTT GTAAGAGAAG AACGAGTGTG AGAGTGGA	21180
GTTCACTG TGACGGTATC TTACCAGAAA GGGACGGCTA ACTACGTGCC AGCAGCCGCG	21240
GTAATACGTA GGTCCCAGC GTTGTCCGGA TTTATTGGGC GTAAAGCGAG CGCAGGCGGT	21300
TAGATAAGTC TGAAGTTAAA GGCTGTGGCT TAACCATA	21338

(2) INFORMATION FOR SEQ ID NO: 21:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6273 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

TGTTTTTAAA GAGCCGTGTC TGGATAGACT TTCGGACGCA ACGCTCTATT AGATAATGAA	60
CTGCCTATAC ACAAGATTTC TAACCTTAGT CGACATGAGC TGAAACCTCT TATTTGTTAA	120
GTAGTTCACA AAATATTATA CACCTATTTT ATGAATAGTC AACTGTCTTT ACAGTAAAAT	180
TTTAGAAAAT CATGAAAATT TTCTCTTCTT TTCCATTTTA AGTGACATTC AGTCATTCTC	240
ACATCAAAAA AGCCCAGACG AAATTGTCTG AGCATTCTTT TATCTAGTCG TTTAAGGAAG	300
TTGAGTTCAG TATGTTTAAA GTCTCTGTCC CATCATTTCT TCAACAAACC TTGTTCTTGG	360
AGAAACTCCT TGGCTACTTG CTTTGCTGAC TTGCCTTCAA CACCGACTTG GTAGTTGAGC	420
TGGCTCATCT GGCTTTCTGT AATCTTACCA GCCAATGTAT TAAGAACTCT TTCCAACCTCT	480
GGGTGTTTCT TGAGAAGAGC TTCTTTCATG AGTGGAGCCC CTTGATAAGG TGGGAAGAGT	540
TGCTTGTCAT CTTCCAAGAC CTGTAAATCA TAACGCTCCA ATTCCGCATC AGTCGAATAG	600
GCATCCGTGA TTTGAATATC CCCTGACTGA ATAGCCTGAT AGCGAAGGGC TGGCTCAATG	660
GTCGCTACAT TGAGATTGAG ACCATACATT GATTGCAAGC CTTATTTCCT ATCTTCACGG	720
TCGTTAAACT CGAGTGTAAG ACCTGCCTTC AACTGCCCTT CCACTTTTTT CAAGTCTGAA	780
ATGGTCTTCA AGCCATATTC TTGAGCAATC TTTTTCGGAA CAGCTACAGC ATAGGTGTTT	840
TGATAAGACA TGGGTTTGAG ATAGGCTAGA TGATCCTGCT TAGCAATGCC ATCACGCGCC	900
ACCTGATAAA CCTGTTCTGG TTCATGACTC ACCTTGGGTG ATGGTTGAAG CAAACTTTCA	960
GTCACCGTAC CAGTAAATTC AGGATAGATG TCAATATCGC CTTTTTTCAG AGCTTCATAA	1020
AGGAAGCTTG TCTTCCCAA ATTCGGTTTA ACAGTCGCAG TCATGCTGGT ATTTTCTTCA	1080
ATCAGCAACT TATACATATT GGCCAAAATT TCTGGTTCTG GACCTATTTT CCCAGCAATA	1140
ACCAAGTTTT CTTCTCTTTT TTGAACCAA AGAGCTGGAC TATAAGACAG ACCCAGTAAT	1200
AAAGCCACCA AGGCAAAACC TGAGAAAATC GTCCGTAATT TTGCTTTTTT CATCACTTTT	1260
AGTAGGAAGT TAAAGGCAAT GGCTAGCACT GCAGAAGAAA GTGCCCCAAT CAAAATCAAA	1320
CTGGCATTAT TACGGTCAAT TCCCAAAGA ATAAAGGAAC CTAGTCCCCC TGCACCAATC	1380
AAGGCCGCA AGGTTGCCGT ACCGATAATC AAAACAGCTG CCGTCCGAAT CCCAGACATG	1440
ATAACAGGCA TGGCGAGTGG AATTTCAAAT TTCTTGAGAC GTTCCCATCT GGTCATCCCA	1500
AAGGCAATCC CAGCCTCTTG CAGGTTCCGA TCAATTCCCT TCAGCCCAGT GATAGTATTT	1560
TGCAAAATAG GGAAAATCGC ATAAATCACT AGAGCTGTCA AAGCCGGCAA GTTCCCAATT	1620
CCCATCAAAG GGATAAAGAG CCCCAACAAG GCCAGAGACG GGATGGTCTG GAAAATACCT	1680
GCAATCTGCA AGACCCAGTC GGCCAGCTTC TCATGATAGC GAAGAAAAAC AGCCAAGGGA	1740

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ATCGCAAGCA	AAATAGCTAG	TAACAAGGTC	AAAAGCGACA	ACTGCAAATG	TTGAGATAGA	1800
GCTGTCAACC	AATCACTAAA	ACGATCCTGA	AAAGTTGCAA	TTAAATTAGT	CATGAACACT	1860
ACCTCCAAAC	AAGTCTGCTA	CAAAGTCTGT	TGCAGGCGCT	TTTAAAATTG	TCTCGGGATT	1920
CGCTACCTGG	CGAATTTCTC	CATCCTGCAA	GACAGCAATA	CGGTCCGCCA	ACTTCAAGGC	1980
TTCATCCGTA	TCATGGGTTA	CAAAAATCGT	TGTCATCCCA	AACTCTTTAT	GCAATTCTTT	2040
TGTCAGAACC	TGCAACTGTT	TTCTCGAAAT	AGCATCCAAG	GCCGAAAAGG	GTTTCATCCAT	2100
GAGGAAAATC	TTGGGCTGAC	CAATCATAGC	TCGGACAATA	CCGACCCGTT	GCTGTTCTCC	2160
ACCAGATAAT	TCACTAGGTA	AGCGATGCCC	ATACTCGGCT	ACTGGTAAAC	CAACCTTAGC	2220
CAAAAGCTCT	TCTGTTTTCT	TCGTAATTTT	TTCTTGCTC	CACCCCTTCA	TTTCAGGAAT	2280
GAGAGCAATA	TTTTCCGCAA	CTGTTAGATT	TGGAAAAAGA	GCAATAGCCT	GTAAACATA	2340
ACCAGTAGAA	AGACGAAGTT	CACGCTCATC	ATAGTCTTTG	ATGCGCTTCC	CATCCATATA	2400
AATATTTCCA	TCAGTTGGTT	CCAAAAGACG	GTAAATCATC	TTGAGCATGG	TCGTCTTACC	2460
TGACCCAGAA	GGCCCTACTA	AAACCATAAA	TTCCCCATCC	TCAATCTGTA	AGTTGACATC	2520
TCTCAAGACA	TCCTTTTCTG	TGTAGCGCAG	TGCTACATTT	TTGTATTCAA	TCATTCTTTG	2580
TCCTCAATTT	AAAACCTCCC	TCGATTGGTC	AAGTCTTCTA	CCTTAGGCAT	AACTTCCTTA	2640
TTATCCCAAT	GCTCCACAAT	TTTCCCGTTC	TCTAAACGGA	AGATATCGTA	CTGGGCATAA	2700
GCAACGCCAT	CAATCTGAGT	CTGACCATAG	CTAACCACAT	AGTTTCCTTG	TCCTAAGAGT	2760
TGGAAAACAA	AGTCAAAAGT	GACACTATAT	TCAGCCACAT	AGTTTTTATA	AGCAGCACTT	2820
CCTTGTTCAA	TATCATGATT	ATGCTGAATC	AAATCGTCTG	CCACATAATC	ACTCCACTGC	2880
TCTAGCTCCC	CATTTTGGAA	AATTTCTGTC	AAGAAACGGC	GAACCAGCTT	TTTATTTTCT	2940
GCTTTCTTAT	CCAAATCCTT	GATTTCAAAA	TCTCCAAAAA	TTTGATCTAG	TTGGTCATTT	3000
TCAGGTGTTT	GATAGTAGTC	AATGACATCC	CAATGCTCAA	CAATACAACC	ATTCTCATCC	3060
TCACGGAAAG	TATCCGTCGT	CACCCATTGA	GCTTCTCCAC	CATTCAGATA	TTGATGAACA	3120
TGAACAAAGA	CCAGATTGCC	ATCCTCAATG	GTGCGGACAA	TCTTAATCTG	ACGCTCTGGA	3180
TGACGCTCAA	AGAAATCTGC	AAAGAAGGCT	GCAAATCCTT	CTTTCCCGTC	AGGAACACCT	3240
GTCGAATGTT	GGATATAGGT	ATCCCCTACA	GACTGGGCTT	GAGCCTCAGC	AACTCGTCCG	3300
TCTTGAATGG	CATGGATGTA	TAGGTTGTGA	GCATTTTTCA	CTTGTTGTGA	CATATTCTAA	3360
ACCTCATTTT	CCTTCTCTTT	CAGATTCGCC	AAAATTCTTT	CTTGAAAACC	TTCAAATTGG	3420
TGAATTTCTT	CCTCTGAAAA	TCCTTTGTAA	AAGATAGTAT	CCAATTTCTG	ACTGACACGA	3480

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TGCCCCACTT	CTTTCTGGGA	CTTGCCTAAC	TCCGTAAAA	CTAAATACTT	CTTACGCTTG	3540
TCTTTTCCAC	ACGGACTAAC	AATTACAAGC	TTTTGTTCCT	CTAGCTTTTT	TATCATAGTC	3600
GTCAGCGTAT	TATTCGCAAG	TCCAGTCGCA	AGCGCGATAT	CTGTCGCAGT	TGCGCAGCCA	3660
GTTTCACTAT	TCCATAAAAC	CGCTAAAATC	TTGCCCTGTT	CACCCCTATA	AAGAGCCTCA	3720
GGATCTTGAC	TCAGTAACTT	TTGAAAAATC	CGCCCATTCa	ACAAACGAAT	ATGATGGGCT	3780
AGCAAATGAC	CATCTTTCAT	AACACCTCCA	ATTTATTTTCG	ATATCGAAAT	GAATAAAACA	3840
ATTGTAACAC	TCATCGTTCT	AACTGTCAAC	TATTTTCGATT	TAGAAATAAT	TTTTGATAAT	3900
TATCCACACC	ACCATACTCC	GGCTCAACTA	ACTTTTAACG	AGAGTTTCTA	AACTCCTTCG	3960
TCCTCCAGTC	TACAAAAGCC	TTCCATTCGT	ACTATCCTAT	ATTTTATGAG	GGGACACATT	4020
TTTCCTATCA	GACCATTTAT	TTTAAAGATA	GAAGTAAATC	ATAATTGCTT	CCATCTGTTC	4080
TTTTATAGTA	TATTGAAGTT	AGACTAGAGC	ACTGTATCTT	CTAAAACATT	GATAGAAAGC	4140
GATTTGAATT	TCCCAATCAA	TTTGTTTCGT	TTTATAGCAT	TTCGAAACTG	GAATAGGACA	4200
CCATGACTGC	TAAAAGATTT	CTATAAATTC	ATTTAATTTTC	CTCAATCAAT	TTGTTTCATAT	4260
CTTATTTTCAT	TCCGCTATAA	TTTCACCTTA	CCCTATCTTT	TTCGTAGCAC	CCTTCAAACA	4320
GCCTATCCCC	TACCGTTTGA	CGATTCCCTCA	CTTCGCTCCA	CTTCCATTAC	AGAAGTTTCT	4380
TCACTACTAT	GGGCTCGGCT	GACTTCTCAT	GATTCCCTGT	TACTACTATT	TGAACGCTCA	4440
CGAGATAGAT	CTTACAAAAA	ATGCTTTGAT	CCACAATGGA	ATCAAAGCAT	TTTAAAGAGT	4500
TCCTCATACA	TAAGCGCAGA	AGTCGCAGTT	CCTCTGTACT	TGGCTTCTTC	TCTTTTGACA	4560
AAGCGAGCCA	AGTTGAGCAA	CTCAGGTGCT	GGATGTTTGG	GATTTAGGAG	CAATTCACGA	4620
TTGACCAGGC	CTGAGAGACG	AACTGCCTGC	AATTGCTCAT	TTGTAGTAGG	CAGTTTTTTA	4680
GTAGTCTCTA	GGAGAGCAGC	AACTAAATCT	TCACTCAAAT	CATGTCGAGC	ATGATTGTAA	4740
AGATCTTTTA	TAAGGCTTTC	TAGGTTTGGT	TCTACCATCC	CTACCACCTC	CCTTATGGTT	4800
TAATAATGTT	TAATCAAATC	AACCGTTGAA	CGATCCAATT	TCTTCACCAA	GGCTTGTAAG	4860
AAAGCTTGCG	CTTCTAGGAA	GTCATCCATT	GCATAGAGGG	TTTGGTGAGA	ATGGATATAA	4920
CGAGCGCAGA	CACCGATAGT	TGTTGATGGG	ACACCACCAT	TTTTTCAGATG	AGCTGCACCT	4980
GCATCTGTTC	CGCCTTTACC	ACAGTAGTAT	TGGTACTTGA	TACCAGCTTC	TTTACGCCGT	5040
GTCAAAAGGA	AATCCTTCAT	CCCTGGGAGA	AGCAAGTGAC	CTGGATCATA	GAAACGAATC	5100
AAGGTTCCAT	CTCCAATCTT	GCCTTGACCA	CCGTAGACAT	CACCTGCTGG	TGAGCAATCA	5160
ACTGCGAGGA	AGACTTCTGG	GTCAAACTTG	GTTGTAGAGG	TATGAGCGCC	ACGCAGACCA	5220
ACTTCTTCTT	GGACGTTAGA	ACCCAGATAG	AGTTCATTGC	CGAGTTTTTG	ACCCGATAAA	5280

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GCTTCAGCTA GCTCGCTTAC CATGAGGACA CCGTAGCGGT TATCCCAAGC TTTTGAGATG	5340
ATATTTTTTT CATTGGCTGT CAAAATTGCA GAACTATCTG GTACAATGGT ATCACCAGGA	5400
CGGATGCCAA AACTTTCTGC CTCAGCCTTG TCCGCAAAAC CACCATCAAA AACGATATCG	5460
GCAATGGCTG GCATGGTTGG TCCCCCTTT CCACGAGTCA AATGCGGAGG AACAGAACCT	5520
GAAATCACAG GAATTTTCATG ACCATCACGA GTCAAGAGTT TGAAACGTTG GCTGCTAACC	5580
ACCATGGGGT TCCAGCCACC GATTTCTACG ACACGGAAGG TACCATCTGG CTTGATTTCG	5640
CTGACCATAA AACCAACTTC GTCCATATGA GAAGCGACCA AGACGCGCGG TGCATCCACA	5700
GCTTCTGAAT GTTTGATACC AAAAATACCA CCAAGCCAT CTGTCACCAC TTCATCCACA	5760
TGCGGTGTCA ACTTTTCACG AAGATAAGCA CGGACAGGCG CTTTCATGACC TGAGACTGCA	5820
GCAAGTTCTG TTAATTCTTT AATTTTTGAA AATAATGTTG TCATTTTCAGT TCCTTCTTTC	5880
TTTCATCCAT TTTACCACTT TTTATAGGAG AAGGATAGTG GGAAGGTGGA TTTCTAAGTT	5940
AGTATCTTAG TCCTGCTCTA TCTTAGAAAA GGATAGTATT CTCTTGCATG TAGTGCAAAA	6000
TCTAGTAAAC ATTCCAAAAT TAACTCGAAT ATTTATTTCC AAACAAAAAA ACAATACACC	6060
ATCAAAGTTG TTTGGATTTT TCATGAAATT TACAGAAAAT AGTTGACTTC CCTTTCTTCT	6120
TTCTTTAAAT ATATAGTTGG TTGAGTTTGG AATAGTACGC TGTAGCTGCT AAAACATTTT	6180
TAGAAATTAA TTTGACTTTC CTAATAGAGT TGTTTCATATC TTATTTCAAT TTACTATAGT	6240
ACAAAACCTAG AAAAGGAAAA AATCATGACC AGG	6273

(2) INFORMATION FOR SEQ ID NO: 22:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 28171 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

ACAACCTTTT TCAAAAACCTC ACCTTGGTAC GGAGATGTTT TGCTTTCTGC TATTATTTTC	60
GGTTATATTC ATATCAATTT TGCTTTAACT CCTCTTGCTT TTTTCATTTA TGCTAGTGGA	120
GGTCTTATTT TAGCTCTATT GTATCGCATG ACTAAAAATC TCTACTATCC AATACTAGTT	180
CATATTCTCA TTAATATCAC TGCCTTCTGG GATGTGTGGT TGCTCCTATT TTCAGGAAGT	240
TAGCTTACTA AAATAATGTC GGAACCTTCC GGCATTTTCT TTTTTCACAA ATAGTCAACG	300
TTTTTCTTTT CGATATTGTA GTGGTGTGTA TCCAGTTATT TTTTGAATT GATTTTGAAA	360

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ATAAGGTTGA	CTTGAGAAAG	GCAGATAGTG	AAGATAGTTA	AGAAGAATAG	GATGTTCTTT	420
TTTCCTTTTT	GGAAAAC TTC	TAAAATATGG	TATAATGAAA	AGATAAAGAA	GTTGGGGGTA	480
GAAGATGAAC	ATTCAACAAT	TACGCTATGT	TGTGGCTATT	GCCAATAGTG	GTACTTTTCG	540
TGAAGCTGCT	GAAAAGATGT	ATGTTAGTCA	GCCGAGTCTG	TCTATTTCTG	TTCGTGATTT	600
GGAAAAAGAG	TTGGGCTTTA	AGATTTTCCG	TCGGACCAGC	TCAGGGACTT	TCTTGACCCG	660
TCGTGGGATG	GAATTTTATG	AAAAATCGCA	AGAATTGGTT	AAAGGATTTG	ATATTTTTCA	720
AAATCAGTAT	GCCAATCCTG	AAGAAGAAAA	AGATGAATTT	TCTGTTGCTA	GCCAGCACTA	780
TGACTTCTTG	CCACCAACTA	TTACGGCCTT	TTCAGAGCGC	TATCCTGACT	ATAAGAACTT	840
CCGTATTTTT	GAATCAACTA	CTGTTCAAAT	ATTAGATGAA	GTGGCGCAAG	GGCATAGTGA	900
GATTGGGATT	ATCTACCTCA	ACAATCAAAA	TAAAAAGGGG	ATTATGCAAC	GGGTTGAAAA	960
ATTAGGTC TG	GAGGTCATCG	AATTGATTCC	TTTCCATACC	CATATTTATC	TCCGTGAGGG	1020
TCATCCTTTA	GCCCAGAAAG	AGGAATTAGT	CATGGAGGAT	TTAGCGGATT	TACCAACGGT	1080
TCGTTTCACT	CAAGAGAAAG	ACGAGTACCT	TTATTATTCA	GAGAACTTTG	TCGATACCAG	1140
CGCTAGCTCA	CAGATGTTTA	ATGTGACAGA	CCGTGCCACC	TTGAATGGTA	TTTTGGAGCG	1200
GACGGACGCC	TATGCGACAG	GTTCTGGATT	TTTAGATAGT	GACAGTGTTA	ATGGCATTAC	1260
AGTTATTCGT	CTCAAGGATA	ACCTAGATAA	CCGCATGGTC	TATGTTAAAC	GTGAAGAAGT	1320
GGAGCTTAGT	CAAGCTGGGA	CTCTCTTCGT	AGAAGTCATG	CAAGAATATT	TTGATCAAAA	1380
GAGGAAATCA	TGAAAAAAG	AGCAATAGTG	GCAGTCATTG	TACTGCTTTT	GATTGGGCTG	1440
GATCAGTTGG	TCAAATCCTA	TATCGTCCAG	CAGATTCCAC	TGGGTGAAGT	GCGCTCCTGG	1500
ATCCCCAATT	TCGTTAGCTT	GACCTACCTG	CAAAATCGAG	GTGCAGCCTT	TTCTATCTTA	1560
CAAGATCAGC	AGCTGTTATT	CGCTGTCATT	ACTCTGGTTG	TCGTGATAGG	TGCCATTTGG	1620
TATTTACATA	AACACATGGA	GGACTCATTC	TGGATGGTCT	TGGGTTTGAC	TCTAATAATC	1680
GCGGGTGGTC	TTGGAAACTT	TATTGACAGG	GTCAGTCAGG	GCTTTGTTGT	GGATATGTTC	1740
CACCTTGACT	TTATCAACTT	TGCAATTTTC	AATGTGGCAG	ATAGCTATCT	GACGGTTGGA	1800
GTGATTATTT	TATTGATTGC	AATGCTAAAA	GAGGAAATAA	ATGGAAATTA	AAATTGAAAC	1860
TGGTGGTCTG	CGTTTGGATA	AGGCTTTGTC	AGATTTGTCA	GAATTATCAC	GTAGTCTCGC	1920
GAATGAACAA	ATTAAATCAG	GCCAGGTCTT	GGTCAATGGT	CAAGTCAAGA	AAGCTAAATA	1980
CACAGTCCAA	GAGGGTGATG	TCGTCACTTA	CCATGTGCCA	GAACCAGAGG	TATTAGAGTA	2040
TGTGGCTGAG	GATCTTCCGC	TAGAAATAGT	CTACCAAGAT	GAGGATGTGG	CTGTCTGTAA	2100
CAAACCTCAG	GGAATGGTTG	TGCACCCGAG	TGCTGGTCAT	ACCAGTGGAA	CCCTAGTAAA	2160

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TGCCCTCATG	TATCATATTA	AGGACTTGTC	GGGTATCAAT	GGGGTTCTGC	GTCCAGGGAT	2220
TGTTACACCGT	ATTGATAAGG	ATACGTCAGG	TCTTCTCATG	ATTGCTAAAA	ACGATGATGC	2280
GCATCTAGCA	CTTGCCCAAG	AACTCAAGGA	TAAAAAGTCT	CTCCGCAAAT	ATTGGGCGAT	2340
TGTTTCATGGA	AATCTACCTA	ATGATCGTGG	TGTAATTGAA	GCGCCGATTG	GCCGGAGTGA	2400
AAAAGACCGT	AAGAAACAGG	CTGTAACTGC	TAAAGGGAAG	CCTGCAGTGA	CGCGTTTTCA	2460
CGTCTTGGA	CGCTTTGGCG	ATTATAGCTT	AGTAGAGTTG	CAACTGGAGA	CAGGGCGCAC	2520
TCATCAAATC	CGTGTCCACA	TGGCTTATAT	CGGCCATCCA	GTCGCTGGTG	ATGAGGTCTA	2580
TGGTCCTCGC	AAGACTTTGA	AAGGACATGG	ACAATTTCTT	CATGCCAAGA	CTTTAGGTTT	2640
TACTCATCCG	AGAACAGGTA	AGACCTTGGA	ATTTAAAGCA	GATATCCCAG	AGATTTTTTAA	2700
GGAAACCTTG	GAGAGATTGA	GAAAGTAAGA	ATGAAAAAGA	AATTAAC TAG	TTTAGCACTT	2760
GTAGGCGCTT	TTTTAGGTTT	GTCATGGTAT	GGGAATGTTC	AGGCTCAAGA	AAGTTCAGGA	2820
AATAAAATCC	ACTTTATCAA	TGTTCAAGAA	GGTGGCAGTG	ATGCGATTAT	TCTTGAAAGC	2880
AATGGACATT	TTGCCATGGT	GGATACAGGA	GAAGATTATG	ATTTCCCAGA	TGGAAGTGAT	2940
TCTCGCTATC	CATGGAGAGA	AGGAATTGAA	ACGTCTTATA	AGCATGTTCT	AACAGACCGT	3000
GTCTTTCGTC	GTTTGAAGGA	ATTGGGTGTC	CAAAAAC TTG	ATTTTATTTT	GGTGACCCAT	3060
ACCCACAGTG	ATCATATTGG	AAATGTTGAT	GAATTACTGT	CTACCTATCC	AGTTGACCGA	3120
GTCTATCTTA	AGAAATATAG	TGATAGTCGT	ATTACTAATT	CTGAACGTCT	ATGGGATAAT	3180
CTGTATGGCT	ATGATAAGGT	TTTACAGACT	GCTGCAGAAA	AAGGTGTTTC	AGTTATTCAA	3240
AATATCACAC	AAGGGGATGC	TCATTTTCAG	TTTGGGGACA	TGGATATTCA	GCTCTATAAT	3300
TATGAAAATG	AAACTGATTC	ATCGGGTGAA	TTAAAGAAAA	TTTGGGATGA	CAATTCCAAT	3360
TCCTTGATTA	GCGTGGTGAA	AGTCAATGGC	AAGAAAATTT	ACCTTGGGGG	CGATTTAGAT	3420
AATGTTTCATG	GAGCAGAAGA	CAAGTATGGT	CCTCTCATTG	GAAAAGTTGA	TTTGATGAAG	3480
TTTAATCATC	ACCATGATAC	CAACAAATCA	AATACCAAGG	ATTTCATTA	AAATTTGAGT	3540
CCGAGTTTGA	TTGTTCAAAC	TTCGGATAGT	CTACCTTGGA	AAAATGGTGT	TGATAGTGAG	3600
TATGTTAATT	GGCTCAAAGA	ACGAGGAATT	GAGAGAATCA	ACGCAGCCAG	CAAAGACTAT	3660
GATGCAACAG	TTTTTGATAT	TCGAAAAGAC	GGTTTTGTCA	ATATTTCAAC	ATCCTACAAG	3720
CCGATTCCAA	GTTTTCAAGC	TGGTTGGCAT	AAGAGTGCAT	ATGGGAACTG	GTGGTATCAA	3780
GCGCCTGATT	CTACAGGAGA	GTATGCTGTC	GGTTGGAATG	AAATCGAAGG	TGAATGGTAT	3840
TACTTTAACC	AAACGGGTAT	CTTGTTACAG	AATCAATGGA	AAAAATGGAA	CAATCATTGG	3900

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TTCTATTTGA	CAGACTCTGG	TGCTTCTGCT	AAAAATTGGA	AGAAAATCGC	TGGAATCTGG	3960
TATTATTTTA	ACAAAGAAAA	CCAGATGGAA	ATTGGTTGGA	TTCAAGATAA	AGAGCAGTGG	4020
TATTATTTGG	ATGTTGATGG	TTCTATGAAG	ACAGGATGGC	TTCAATATAT	GGGGCAATGG	4080
TATTACTTTG	CTCCATCAGG	GGAAATGAAA	ATGGGCTGGG	TAAAAGATAA	AGAAACCTGG	4140
TACTATATGG	ATTCTACTGG	TGTCATGAAG	ACAGGTGAGA	TAGAAGTTGC	TGGTCAACAT	4200
TATTATCTGG	AAGATTCAGG	AGCTATGAAG	CAAGGCTGGC	ATAAAAAGGC	AAATGATTGG	4260
TATTTCTACA	AGACAGACGG	TTCACGAGCT	GTGGGTTGGA	TCAAGGACAA	GGATAAATGG	4320
TACTTCTTGA	AAGAAAATGG	TCAATTACTT	GTGAACGGTA	AGACACCAGA	AGGTTATACT	4380
GTGGATTCAA	GTGGTGCCTG	GTTAGTGGAT	GTTTCGATCG	AGAAATCTGC	TACAATTAAA	4440
ACTACAAGTC	ATTCAGAAAT	AAAAGAATCC	AAAGAAGTAG	TGAAAAAGGA	TCTTGAAAAT	4500
AAAGAAACGA	GTCAACATGA	AAGTGTTACA	AATTTTTCAA	CTAGTCAAGA	TTTGACATCC	4560
TCAACTTCAC	AAAGCTCTGA	AACGAGTGTA	AACAAATCGG	AATCAGAACA	GTAGTAGAAA	4620
AGAAGGTTTT	AGGGCCTTCT	TTTTCTTATC	AACTCTTTTC	TATTTCTGT	TATTCATGTT	4680
ATAATGGATA	AATATGAATA	ATCGGAGTGA	GACTATGAAA	TACAAACGGA	TTGTCTTTAA	4740
GGTGGGTACT	TCTTCTCTGA	CAAATGAGGA	TGGAAGTTTA	TCACGTAGTA	AGGTAAAGGA	4800
TATTACCCAG	CAGTTGGCTA	TGCTGCACGA	GGCTGGTCAT	GAGTTGATTT	TGGTGTCTTC	4860
AGGTGCCATT	GCGGCTGGTT	TTGGAGCCTT	AGGATTTAAA	AAGCGTCCGA	CTAAGATTGC	4920
TGATAAACAG	GCTTCAGCAG	CGGTAGGGCA	GGGGCTTTTG	TTGGAAGAAT	ATACAACCAA	4980
TCTTCTCTTG	CGTCAAATCG	TTTCTGCACA	AATCTTGCTG	ACCCAAGATG	ACTTTGTGGA	5040
TAAGCGTCGT	TATAAAAATG	CCCATCAGGC	TTTGTCGGTT	TTGCTCAACC	GTGGGGCAAT	5100
TCCTATCATC	AATGAGAATG	ATAGTGTCGT	TATTGATGAG	CTCAAGGTTG	GGGACAATGA	5160
CACTCTAAGT	GCTCAAGTAG	CGGCGATGGT	CCAAGCAGAC	CTTTTAGTTT	TCTTGACAGA	5220
TGTGGACGGT	CTCTATACTG	GAAATCCTAA	TTCAGATCCA	AGAGCCAAAC	GCTTGGAGAG	5280
AATCGAGACC	ATCAATCGTG	AGATTATTGA	TATGGCTGGT	GGAGCTGGTT	CGTCAAACGG	5340
AACTGGGGGT	ATGTTAACCA	AAATCAAGGC	TGCAACTATC	GCGACGGAAT	CAGGAGTTCC	5400
TGTTTATATC	TGCTCATCCT	TGAAATCAGA	TTCCATGATT	GAGGCGGCAG	AGGAGACCGA	5460
GGATGGTTCT	TACTTTGTTG	CTCAAGAGAA	GGGGCTTCGT	ACCCAGAAAC	AATGGCTTGC	5520
CTTCTATGCT	CAGAGTCAAG	GTTCTATTTG	GGTTGATAAA	GGGGCTGCGG	AAGCTCTCTC	5580
TCAATATGGA	AAGAGTCTTC	TCTTATCTGG	TATCGTTGAA	GCAGAAGGAG	TCTTTTCTTA	5640
CGGTGATATC	GTGACAGTAT	TTGACAAGGA	AAGTGGAATA	TCACTTGGA	AAGGACGCGT	5700

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GCAATTTGGA	GCATCTGCTT	TGGAGGATAT	GTTGCGTTCT	CAAAAAGCCA	AGGGTGTCTT	5760
GATTTACCGT	GACGACTGGA	TTTCCATTAC	TCCTGAAATC	CAACTACTTT	TTACAGAATT	5820
TTAGAGGTAA	ACTATGGTGA	GTAGACAAGA	ACAATTTGAA	CAGGTACAGG	CTGTTAAAAA	5880
ATCGATTAAC	ACAGCTAGTG	AAGAAGTGAA	AAACCAAGCC	TTGCTAGCCA	TGGCTGATCA	5940
CTTAGTGGCT	GCTACTGAGG	AAATTTTAGC	GGCTAATGCC	CTCGATATGG	CAGCGGCTAA	6000
GGGGAAAATC	TCAGATGTGA	TGTTGGATCG	TCTTTATTTG	GATGCAGATC	GTATAGAAGC	6060
GATGGCAAGA	GGAATTCGTG	AAGTGGTTGC	CTTACCAGAT	CCAATCGGTG	AAGTTTTAGA	6120
AACAAGTCAG	CTTGAAAATG	GTTTGGTTAT	CACAAAAAAA	CGTGTAGCTA	TGGGTGTCAT	6180
CGGTATTATC	TATGAAAGCC	GTCCAAATGT	GACGTCTGAT	GCGGCTGCTT	TGACTCTTAA	6240
GAGTGGAAAT	GCGGTTGTTC	TTCGTAGTGG	TAAGGATGCC	TATCAAACAA	CCCATGCCAT	6300
TGTCACAGCC	TTGAAGAAGG	GCTTGGAGAC	GACTACTATT	CATCCAAATG	TGATTCAACT	6360
GGTGGAGGAT	ACTAGCCGTG	AAAGTAGTTA	TGCTATGATG	AAGGCCAAGG	GCTATCTAGA	6420
CCTTCTCATT	CCTCGTGGAG	GAGCTGGCTT	GATCAATGCA	GTGGTTGAGA	ATGCGATTGT	6480
ACCTGTTATC	GAGACAGGGA	CTGGGATTGT	CCATGTCTAT	GTGGATAAGG	ATGCAGACGA	6540
AGACAAGGCG	CTGTCTATCA	TCAACAATGC	TAAAACCAGT	CGTCCTTCTG	TTTGTAATGC	6600
CATGGAGGTT	CTGCTGGTTC	ATGAAAACAA	GGCAGCAAGC	TTCTTCCTC	GCTTGGAGCA	6660
AGTGTGTTGTT	GCAGAGCGTA	AGGAAGCTGG	ACTGGAACCA	ATTCAATTCC	GCCTAGATAG	6720
CAAAGCAAGC	CAGTTTGTTT	CAGGTCAAGC	AGCTGAGACC	CAAGACTTTG	ACACCGAGTT	6780
TTTAGACTAT	GTCCTTGCTG	TTAAGGTTGT	GAGCAGTTTA	GAAGAAGCGG	TTGCGCACAT	6840
TGAATCCCAC	AGCACCCATC	ATTCGGATGC	TATTGTGACG	GAAAATGCTG	AAGCTGCAGC	6900
ATACTTTACA	GATCAAGTGG	ACTCTGCAGC	GGTGTATGTT	AATGCCTCAA	CTCGTTTCAC	6960
AGATGGAGGA	CAATTTGGTC	TTGGTTGTGA	AATGGGGATT	TCTACTCAGA	AATTGCACGC	7020
GCGTGGTCCC	ATGGGCTTGA	AAGAGTTGAC	CAGCTACAAG	TATGTGGTTG	CCGGTGATGG	7080
GCAGATAAGG	GAGTAAGAGA	TGAAGATTGG	ATTTATCGGT	TTGGGGAATA	TGGGTGCTAG	7140
CTTGGCAAAA	TCTGTCTTGC	AGACTAGGAC	GTCAGATGAG	ATTCTCCTTG	CCAATCGTAG	7200
TCAAGCTAAG	GATAGTGCTT	TCATTGCAGA	CTTTGGTGGT	CAGGCTTCCA	GCAATGAAGA	7260
AATGTTTGCA	GAAGCAGATG	TGATTTTTCT	AGGAGTTAAG	CCTGCTCAGT	TTTCTGAACT	7320
GCTTTCTCAA	TACCAGACCA	TCCTTGAAAA	AAGAGAAAGT	CTTCTTTTGA	TTTCGATGGC	7380
AGCTGGATTG	ACCTTAGAAA	AACTAGCAAG	TCTTATCCCA	AGTCAACACC	GAATTATTCG	7440

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TATGATGCCT	AATACCCCTG	CTTCTATCGG	GCAAGGAGTG	ATTAGTTATG	CCTTGTCTCC	7500
TAATTGCAGG	GCTGAGGACA	GTGAGCTCTT	TTATCAGCTT	TTAGCCAAGG	CTGGTCTCTT	7560
GGTTGAACTA	GGAGAAAGTT	TAATCGATGC	AGCGACAGGT	CTTGCAGGTT	GTGGACCAGC	7620
CTTTGTCTAT	CTTTTATATCG	AGGCCTTGGC	AGATGCAGGT	GTTTCAGACAG	GATTACCACG	7680
AGAAATAGCA	TTGAAAATGG	CAGCACAAAC	TGTGGTAGGA	GCTGGGCAAT	TGGTCCTTGA	7740
AAGTCAGCAA	CATCCTGGAG	TATTGAAAGA	CCAAGTCTGT	AGCCCAGGCG	GTTGCGACTAT	7800
CGCTGGTGTA	GCAAGCCTAG	AAGCGCATGC	TTTCCGAGGA	ACAGTCATGG	ATGCAGTTCA	7860
TCAAGCCTAC	AAACGAACAC	AAGAACTAGG	TAAATAAGAG	GTAGTTTTGA	CTGCCTCTTT	7920
TATGGTGGCT	GAAATGAGAA	GACACAAAAA	GATTGTCACA	AACCCCTATT	TTTTTGATAG	7980
AATAGAAGTA	GTAAAAAAGA	AATGAGTTAG	ACATGTCAAA	AGGATTTTTTA	GTCTCTCTTG	8040
AGGGACCAGA	GGGAGCAGGC	AAGACCAGTG	TTTTAGAGGC	TCTGCTACCA	ATTTTAGAGG	8100
AAAAAGGAGT	AGAGGTGTTG	ACGACCCGTG	AACCTGGCGG	AGTCTTGATT	GGGGAGAAGA	8160
TTCCGGGAAGT	GATTTTGGAT	CCAAGTCATA	CTCAGATGGA	TGCTAAAACA	GAGCTACTTC	8220
TCTATATTGC	CAGTCGCAGA	CAGCATTTGG	TGGAAAAAGT	TCTTCCAGCC	CTTGAAGCTG	8280
GCAAGTTGGT	CATCATGGAT	CGTTTTATCG	ATAGTTCTGT	TGCCTATCAG	GGATTTGGTC	8340
GTGGCTTAGA	TATTGAAGCC	ATTGACTGGC	TCAATCAGTT	TGCGACAGAT	GGCCTCAAAC	8400
CCGATTTGAC	ACTCTATTTT	GACATCGAGG	TGGAAGAAGG	GCTGGCTCGT	ATTGCTGCTA	8460
ATAGTGACCG	CGAGGTTAAT	CGTTTGGATT	TGGAAGGGTT	GGAAGTTGCAT	AAAAAAGTTC	8520
GTCAAGGCTA	CCTTTCTCTT	CTGGATAAAG	AGGGAAATCG	CATTGTCAAG	ATTGATGCTA	8580
GTCTCCCTTT	GGAGCAAGTT	GTGGAAACTA	CCAAGGCTGT	CTTGTTTGAC	GGAATGGGCT	8640
TGGCCAAATG	AAACAAGATC	AACTAAAGGC	TTGGCAACCA	GCTCAGTTTG	ACCGTTTTGT	8700
CCGTATCTTA	GAACAAGACC	AGCTCAATCA	CGCCTATCTC	TTTTTCAGGT	TCTTTGAAAG	8760
CTTGGAATG	GCGCAATTTT	TAGCTAAGAG	CCTCTTTTGT	ACGGATAAAG	TTGGCGTCTT	8820
ACCATGTGAG	AAATGCCGAA	GTTGCAAGCT	GATTGAACAG	GGAGAATTTT	CCGATGTCAC	8880
CTTGATTAAA	CCAGTTAATC	AGGTCATTAA	GACGGAACGC	ATTTCGAGAAT	TGGTGGGTCA	8940
GTTTTCTCAA	GCAGGGATTG	AAAGCCAGCA	ACAGGTCTTT	ATCATCGAGC	AAGCGGATAA	9000
AATGCATCCC	AACGCAGCCA	ATTCTCTGCT	CAAGGTCATC	GAAGAACCCC	AGAGTGAAGT	9060
TTATATTTTC	TTCTTGACTA	GCGATGAGGA	AAAGATGTTA	CCGACAATCC	GAAGTCGGAC	9120
TCAGATCTTC	CACTTTAAAA	AGCAAGAAGA	AAAACCTTATC	TTACTCTTAG	AACAAATGGG	9180
ACTTGTTAAG	AAAAAAGCGA	CTCTTTTAGC	TAAGTTTAGT	CAATCGCGAG	CTGAAGCAGA	9240

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AAAGTTGGCT	AATCAGGCAA	GTTTTTGGAC	CTTGGTCGAT	GAAAGTGAAC	GCCTGCTGAC	9300
TTGGTTAGTA	GCTAAGAAAA	AAGAAAGTTA	TCTACAGGTT	GCCAAATTAG	CCAACCTGGC	9360
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GAAAAATCTC	AAGAGCCTGG	TAGAGGAAAA	TACAGCTCTT	CGCTTGGAAG	ATAGTAAGTT	9720
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AAGTGTCCGT	CGCATTTACC	GTGATGGATT	TCACGTATGT	AATGATTTTT	ATGGACAACG	9840
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CAGATTCAAA	AAAGTTTTAA	GGGGCAGTCT	CCCTATGGCA	AGCTGTATCT	AGTGGCAACG	9960
CCGATTGGCA	ATCTAGATGA	TATGACTTTT	CGTGCTATCC	AGACCTTGAA	AGAAGTGGAC	10020
TGGATTGCTG	CTGAGGATAC	GCGCAATACA	GGGCTTTTGC	TCAAGCATTT	TGACATTTCC	10080
ACCAAGCAGA	TCAGTTTTCA	TGAGCACAAAT	GCCAAGGAAA	AAATTCCTGA	TTTGATTGGT	10140
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GACCCTGGTC	ATGATTTAGT	TAAGGCAGCT	ATTGAGGAAG	AAATTGCAGT	TGTGACAGTT	10260
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AAAGATTATC	CTGAAACACA	GATTTTTTAT	GAATCACCTC	ATCGTGTAGC	AGACACGTTG	10440
GAAAATATGT	TAGAAGTCTA	CGGTGACCGC	TCCGTTGTCT	TGGTCAGGGA	ATTGACCAAA	10500
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GACGAGGAAG	ACTTGTTTCGT	AGAAATTCAA	ACCCGCATCC	AGCAAGGTGT	GAAGAAAAAC	10680
CAAGCTATCA	AGGAAGTCGC	TAAGATTTAC	CAGTGGAATA	AAAGTCAGCT	CTACGCTGCC	10740
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GTCCAGCGGT	GGAAGCGGGA	GAGAGTCTTG	GATTTCTTCC	GGGTGATCTT	AAGGAGAAGG	18000
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TTTTTATGCT	AGACTAGTGA	AAATCAAGCT	CTAATGGAGG	GAAAAGTATG	GAATCAATAT	21900
TTGTGAAATT	TGCCCAGTAT	CCGTCTATAG	AAACGGAGCG	TTTATTGCTC	AGACCTGTAA	21960
CTTTGGATGA	TGCGGAACAA	TGTTTGACTA	TGCCTCGGAC	AAGGGTAATA	CACGTTACAC	22020
TTTTTCCAACC	AATCAAAGCT	TGGAAGAAAC	CAAGAATAAC	ATTGCTCAGT	TCTACTTGGC	22080
TAATCCCTTG	GGACGTTGGG	GAATAGAACT	AAAAAGCAAT	GGTCAGTTTA	TTGGAACCAT	22140
TGACTTGACAC	AAGATTGATT	CTGTTCTTAA	GAAGGCAGCT	ATTGGCTACA	TTATCAATAA	22200
AAAGTATTGG	AATCAAGGAT	TAACGACAGA	AGCCAATCGT	GCTGTGATTG	AGCTAGCTTT	22260
TGAGAAGATA	GGGATGAATA	AGTTGACTGC	CCTTCACGAT	AAGGCTAATC	CCGCGTCAGG	22320
AAAGGTCATG	GAGAAATCAG	GCATGCGTTT	TTCCCATGCA	GAACCATATG	CTTGTATGGA	22380
CCAGCATGAA	AAAGGCCGAA	TCGTGACAAG	AGTTCATTAT	GTCTTGACCA	AGGAAGACTA	22440
TTTTTGCAAAT	AAATAAGCAG	TTGAAAAGAA	ATTTTTTCGAC	TGTTTTTTCT	TCCTCTTACG	22500
AATAATCTAA	GAGAGGAGAA	AATATGGAAG	CAATTATCGA	GAAAATCAAA	GAGTATAAAA	22560
TCATCGTCAT	CTGTACTGGT	CTGGGCTTGC	TTGTAGGAGG	ATTTTTTCCTG	CTAAAACCAG	22620
CTCCACAAAC	ACCTGTCAAA	GAGACGAATT	TGCAGGCTGA	AGTTGCAGCT	GTTTCCAAGG	22680
ACTCATCGAC	CGAAAAGGAA	GTGAAGAAGG	AAGAAAAGGA	AGAACCCCTT	GAACAAGATC	22740
TAATCACAGT	AGATGTCAAA	GGTGCTGTCA	AATCGCCAGG	GATTTATGAC	TTGCCTGTAG	22800
GTAGTCGAGT	CAATGATGCT	GTTCAGAAGG	CTGGTGGCTT	GACAGAGCAA	GCAGACAGCA	22860
AGTCGCTCAA	TCTAGCTCAG	AAAGTTAGTG	ATGAGGCTCT	GGTTTACGTT	CCTACTAAGG	22920
GAGAAGAAGC	AGTTAGTCAA	CAGACTGGTT	CGGGGACAGC	TTCTTCAACA	AGCAAGGAAA	22980
AGAAGGTCAA	TCTCAACAAG	GCCAGTCTGG	AAGAACTCAA	GCAGGTCAAG	GGACTGGGAG	23040
GAAAACGAGC	TCAGGACATT	ATTGACCATC	GTGAGGCAAA	TGGCAAGTTC	AAGTCAGTAG	23100
ACGAGCTCAA	GAAGGTCTCT	GGCATTGGTG	GCAAAACAAT	AGAAAAGCTT	AAAGACTATG	23160
TTACAGTGGA	TTAAGAATTT	CTCTATTCCC	CTAATTTACC	TGAGTTTTCT	ATTACTTTGG	23220
CTTTATTACG	CTATTTTCTC	AGCATCTTAT	CTTGCTTTGT	TGGGCTTTGT	TTTTCTGCTA	23280
GTCTGTCTCT	TTATCCAATT	TCCGTGGAAA	TCTGCTGGTA	AAGTTCTAAT	AATTTGCGGA	23340
ATCTTTGGAT	TTTGGTTTGT	TTTTCAAAAT	TGGCAACAGA	GTCAAGCGAG	TCAAAATCTG	23400

GCGGATTCTG	TTGAAAGGGT	ACGGATTTTG	CCTGATACTA	TTAAGGTAA	TGGTGATAGT	23460
CTATCCTTTC	GTGGCAAGTC	TAACGGTCGT	GCTTTCCAAG	TCTATTATAA	ACTCCAGTCC	23520
GAGGAGGAGA	AAGAAGCCTT	TCAAGCTTTA	ACTGACCTGC	ATGAGATAGG	ACTAGAAGGG	23580
AAGCTTTCGG	AGCCAGAAGG	GCAGAGAAAT	TTTGGTGGCT	TTAATTACCA	AGCCTATCTG	23640
AAGACTCAGG	GAATTTACCA	GACTCTCAAT	ATCAAAACAA	TCCAGTCACT	TCAAAAGATT	23700
GGCAGTTGGG	ATATAGGAGA	AAACTTGTCC	AGTTTACGTC	GAAAGGCTGT	GGTTTGGATT	23760
AAGACGCACT	TTCCAGACCC	TATGGGCAAT	TACATGACAG	GACTCTTGCT	GGGACATCTG	23820
GACACCGACT	TTGAGGAGAT	GAATGAGCTT	TATTCCAGTC	TAGGAATTAT	CCACCTCTTT	23880
GCCCTATCTG	GCATGCAGGT	AGGTTTTTTC	ATGAATGGAT	TTAAGAAACT	TCTCTTGCGA	23940
TTGGGCTTGA	CCCAAGAAAA	GTTGAAATGG	CTGACTTATC	CCTTTTCCCT	TATCTATGCG	24000
GGACTAACTG	GATTTTCAGC	ATCGGTTATT	CGCAGTCTCT	TGCAAAAGCT	ACTGGCTCAA	24060
CATGGGGTTA	AGGGCTTGGA	TAATTTTGCC	TTGACGGTGC	TTGTCCTCTT	TATTGTCATG	24120
CCAAACTTTT	TCTTGACAGC	AGGAGGAGTC	TTGTCCTGCG	CTTATGCTTT	TATCCTGACC	24180
ATGACCAGCA	AAGAAGGGGA	GGGGCTCAAG	GCTGTTACTA	GTGAAAGTCT	AGTCATCTCC	24240
TTGGGCATAT	TGCCCATTCT	ATCCTTCTAT	TTTGCGGAAT	TTCAACCTTG	GTCTATCCTT	24300
TTGACCTTTG	TCTTTTCCTT	TCTTTTTGAC	TTGGTCTTCT	TACCGCTCTT	GTCTATCTTA	24360
TTTGTCTTTT	CCTTTCTCTA	TCCAGTCATT	CAGCTGAACT	TTATCTTTGA	ATGGTTAGAG	24420
GGCATTATTC	GCTTGGTCTC	GCAGGTGGCA	AGGAGACCAC	TTGTCTTTGG	TCAACCCAAC	24480
GCATGGCTTT	TAATCTTATT	GTTAATTTCC	TTGGCTTTGG	TCTATGATTT	GAGGAAAAAC	24540
ATTAAAGGAT	TAACAGTATT	GAGTTTATTG	ATTACAGGTC	TCTTTTTTCCT	TACCAAGTAT	24600
CCACTGGAAA	ATGAAATCAC	CATGCTGGAT	GTGGGGCAAG	GAGAAAGTAT	TTTCTACGGG	24660
ATGTAACTGG	GAAAACCATT	CTCATAGATG	TAGGTGGTAA	GGCAGAATCT	TATAAGAAAA	24720
TCAAAAAATG	GCAAGAAAAG	ATGACGACCA	GCAATGCCCA	GCGAACCTTG	ATTCCCTATC	24780
TCAAAAGTCG	AGGAGTAGCT	AAGATTGACC	AGCTAATTTT	GACTAACACG	GACAAGGAGC	24840
ATGTTGGAGA	TTTGTCTAGAG	ATGACCAAGG	CTTTCCATGT	AGGGGAGATT	CTAGTATCAA	24900
AAGACAGTCT	GAAACAGAAG	GAATTTGTGG	CAGAACTACA	GGCGACTCAA	ACAAAGGTGC	24960
GTAGTATGAT	AGTAGGGGAG	AACTTGCCCA	TTTTTGGAAG	TCAGTTAGAA	GTTCTATCTC	25020
CAAGGAAAAT	GGGAGATGGA	GGACACGATG	ATACCCTAGT	TCTGTATGGG	AAATTCTTGG	25080
ATAAGCAATT	TCTCTTCACG	GGAAATTTGG	AGGAGAAAGG	AGAGAAGGAC	TTGCTGAAGC	25140

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ACTATCCAGA	CTTGAAAGTA	AATGTTTTGA	AAGCTAGCCA	ACATGGCAAT	AAAAAATCAT	25200
CAAGTCCAGC	CTTTCTAGAA	AAACTCAAAC	CAGAGCTTAC	TCTTATCTCA	GTTGGAAAGA	25260
GCAATCGAAT	GAAACTCCCC	CATCAGGAAA	CATTGACACG	ACTGGAAGGT	ATCAATAGCA	25320
AAGTTTATCG	AACTGACCAG	CAAGGAGCTA	TACGTTTTAA	GGGGTTGGAT	AGTTGGAAAA	25380
TCGAAAGTGT	TCGATAGGAA	GGATAAATGT	TGTAGATTAG	TGAAATAAAC	TAAAAATTTG	25440
TTGCATAATA	ATGATAAAAA	TGGTATAATG	AAAACGTATT	CAATATTGAG	GATATAAAAT	25500
CATTA AAAAT	CAGCAAAAAGT	TGTTTTATTA	GTTAGTTTAT	AATCTATTGG	TCTTCTTCAG	25560
TCCAGTGTAT	CTGCTGTGAC	AGTCACTAAA	AGTTACAAGT	ATGATTGGAA	TACGGTTTGG	25620
GAATATAGTA	CCAACTATCA	CGACCATCAG	TATGCTTGGA	TTCCGTCATG	GTCTCGTTAT	25680
GACAGCTATT	CTGAGTATAA	AGTTGGCGGA	GGCTGGA ACT	ACGCTCGTTA	TGAGGTCATA	25740
AACTATTACA	GCGGAGGCTA	TTAATTCTTA	AAGAGTGAGA	AAAAGGAGGG	CTAGATATGT	25800
TGCAGCTTAC	TCATGTGACC	TTAAAAACGC	GACAAGTCAT	CTTGCAAGAT	GTGGATTTCA	25860
CCTTTAAAAA	GGGTAGGGTT	TATGGTCTTC	TTGCTATCAA	TGGCTCTGGA	AAGACGACCC	25920
TGTTCCGTGC	CATTAGCAAT	TTAATTCCCA	TAAGTAGTGG	AAATATCGCA	GCCCCCTCCTT	25980
CTTTATTTTA	TTATGAGAGT	ATTGAATGGC	TGGATGGAAA	CTTAAGTGGG	ATGGACTACC	26040
TTCGTCTTAT	CAAAAACATC	TGGAAGTCAG	GTCTGAACTT	GAGGGATGAA	ATCGCCTATT	26100
GGGAAATGTC	TGACTATATC	AGTCTTCCCA	TTGCAAGTA	TTCCCTTAGGC	ATGAAGCAAC	26160
GCTTGGTGAT	TGCCATGTAT	TTCCTCAGTC	AGGCCAAATG	CTGGCTCATG	GATGAGATTA	26220
CAAATGGCTT	AGATGAGTAT	TATCGACAGA	AGTTTTTTGA	TAGGCTAGCA	CAAATCGATA	26280
GACAAGAACA	GCTGGTTCTT	TTAAGTTCCC	ACTATAAGGA	AGAGTTGGTT	GATGTCTGCG	26340
ATAGAGTAGT	AACCATT CAT	CAGGGGCAGA	TAGAAGAGGT	TTAGTTTATG	AAAGATGTTA	26400
GTCTATTTTT	ATTGAAAAAA	GTTTTCAAAA	GCCGCTTAAA	CTGGATTGTC	TTAGCTTTAT	26460
TTGTATCTGT	ACTCGGTGTT	ACCTTTTATT	TAAATAGTCA	GA CTGCAAAC	TCACACAGCT	26520
TGGAGAGCAG	GTTGGAAAGT	CGCATTGCAG	CCAACGAGAG	GGCTATCAAT	GAAAATGAAG	26580
AGAAACTCTC	CCAAATGTCT	GATACCAGCT	CGGAGGAATA	CCAGTTTGCT	AAAAATAATT	26640
TAGACGTGCA	AAAAAATCTT	TTGACGCGAA	AGACAGAAAT	TCTGACTTTA	TTAAAAGAAG	26700
GGCGCTGGAA	AGAAGCCTAC	TATTTGCAGT	GGCAAGATGA	AGAGAAGAAT	TATGAATTTG	26760
TATCAAATGA	CCCGACTGCT	AGCCCTGGCT	TAAAAATGGG	GGTTGACCGC	GAACGGAAGA	26820
TTTACCAAGC	CCTGTATCCC	TTGAACATAA	AAGCACATAC	TTTGGAGTTT	CCGACCCACG	26880
GGATTGATCA	GATTGTCTGG	ATTTTAGAGG	TTATCATCCC	AAGTTTGTTT	GTGGTTGCTA	26940

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TTATTTTAT	GCTAACACAA	CTATTTGCAG	AAAGATATCA	AAATCATCTG	GACACAGCTC	27000
ACTTATATCC	TGTTTCAAAA	GTGACATTTG	CAATATCCTC	TCTTGGAGTT	GGAGTGGGAT	27060
ATGTAAGTGT	GCTGTTTATC	GGAATCTGTG	GCTTTTCTTT	TCTAGTGGGA	AGTCTGATAA	27120
GTGGTTTTGG	ACAGTTAGAT	TATCCCTACC	CAATTTATAG	CTTAGTGAAT	CAAGAAGTAA	27180
CTATTGGGAA	AATACAAGAT	GTATTATTTT	CTGGCTTGCT	CTTAGCTTTC	TTAGCCTTTA	27240
TCGTCATTGT	GGAAGTTGTG	TACTTGATTG	CTTACTTTTT	CAAGCAAAA	ATGCCTGTCC	27300
TCTTTCTTTC	ACTCATTGGG	ATTGTTGGCT	TATTGTTTGG	TATCCAAACC	ATTCAGCCTC	27360
TTCAAAGGAT	TGCACATCTG	ATCCCTTTA	CTTACTTGCG	TTCAGTGGAG	ATTTTATCTG	27420
GAAGATTACC	TAAGCAGATT	GATAATGTCG	ATCTAAATTG	GAGCATGGGA	ATGGTCTTAC	27480
TTCTTGCCCT	GATTATCTTT	TTGCTATTGG	GAATTCTATT	TATTGAAAGA	TGGGGAAGTT	27540
CACAGAAAA	AGAATTTTTT	AATAGATTCT	AGCTTTCCTA	TAGGTAGGGA	AAATAAGTAA	27600
AAACTAACAT	AGAGAGGGAA	TCAACTTGAT	TCTCTCTTTT	TGATTCGAAA	ACCAAACCAA	27660
AATACAAACA	CAAACCTTTC	AAAAAATAAC	TTTTTATCTT	GACAAGAGCT	AGAAAACCTG	27720
GTATCATATA	AAAGTTGAGA	AAAGCAGAAG	TGAGAGCTTC	TCGCCTTGTT	ACATTAAGTT	27780
GCCTGGCCCT	ACGGATGAAA	AGTTTCGAAG	AAACGCTATC	ATAACGTGCG	GGCTTGATATA	27840
TTTACAAGTC	CGCTATTGTT	TTTCTCTAAT	AAAACAAAAG	AGGTGAAAAC	CATAGCAAAG	27900
CAAGACTTAT	TCATCAATGA	TGAGATTTCG	GTACGTGAAG	TTCGCTTGAT	TGGTCTTGAA	27960
GGAGAACAGC	TAGGTATCAA	GCCACTCAGT	GAAGCGCAAG	CTTTGGCTGA	TAACGCTAAT	28020
GTTGACCTAG	TATTGATTCA	ACCCCAAGCC	AAACCGCCTG	TTGCAAAAAT	TATGGACTAC	28080
GGTAAGTTCA	AATTTGAGTA	CCAGAAGAAG	CAAAAAGAAC	AACGTAAAAA	ACAAAGCGTT	28140
GTTACTGTGA	AAGAAGTTCG	TCTAAGTCCG	G			28171

(2) INFORMATION FOR SEQ ID NO: 23:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 7147 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

CCGCTCAACT	TTTGCAATCA	AGGCTAAGTA	GACAGCAGCA	AATTTCATAT	TGTATAATTT	60
CTGACTCATA	CTTCTCTCTT	TCTATGTGTA	CTAGTATAAA	TAAGAAAAAG	AAGGCCGTCA	120

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AGCCTTCTTT	TGATTTATTC	TTCTGCTTCA	TCTTCTGTAA	ATTGACTATT	GTACAAGTCA	180
GCGTAGAAGC	CACCTTGCGC	CATCAGTTCC	TCATAGTTGC	CTTGCTCGAT	GATATTTCCA	240
TCTTTCATGA	CCAAGATCAA	GTCTGCATTT	CGGATGGTTG	ACAAGCGGTG	GGCAATGACA	300
AAGGATGTGC	GTCCTTCCAT	CAAACGGTCC	ATGGCTTTTT	GGATCAATTC	CTCTGTCCGT	360
GTGTCAACAG	AAGAAGTCGC	CTCATCCAAA	ATCAAAAGCG	GTGCATCCTT	AAGAAGGGCA	420
CGAGCAATAG	TCAATAGTTG	TTTTTGTCTT	ACAGACAAGG	TCACGGTGTC	ATCCAAGATG	480
GTATCATAGC	CATCTGGCAA	GGTCATAATA	AAGTGGTGAA	TTCCACACAGC	CTTACTAGCT	540
TCCATCATTC	GTTTCATCACT	AATCCCTATT	TGATTATAGA	TGAGATTGTC	TCGAATAGTT	600
CCTTCAAAGA	GCCAGGTATC	CTGCAAGACC	ATTGAAAAGG	CATCATGCAC	TTCTGAACGC	660
GTCATAGCCT	TGGTATCCAC	ACCATCAATG	CGAATACTTC	CCTTATCAAT	CTCATAGAAT	720
TTCATCAAAA	GATTGACAAT	GGTTGTCTTA	CCAGCCCCAG	TCGGCCCCAAC	AATGGCAACC	780
TTTTTGACCAG	CATGAGCTGT	CGCAGAGAAG	TCATAGTCTT	GAACATTGAC	ACCGTCCACC	840
AGAATTTCTC	CTGCTGACAC	GTCGTAGAAA	CGTGGAATCA	GATTGACCAG	AGTTGATTTA	900
CCAGAACCTG	TTGACCCAAT	AAAGGCCACT	GTTTGACCAG	TTTCTGCTTT	AAAGCTAACA	960
TGTTCAATAA	CTGCCTCCGA	ATTTGCCGCA	TAGCGgAAGG	TCACATCCTT	AAACTCGACC	1020
TGACCTTTGA	AGTTTTTCATC	AGTCAGCTGC	ACTTGAACAG	GGTTTTGGAT	AGAAGAATGC	1080
AAATCTAAAA	CTTGATTAAT	CCGCTTAGCA	GAGACCATAG	TTCCGGGAAG	AACGATGAAG	1140
AGTGCTCCCA	TGAGAAGGAA	GCCCATGACA	ACCTACATGG	CATAAGACAT	GAAAACAATC	1200
ATGTCACTAA	AGAGAGGCAG	ACGCGCTATC	GGAGCAGCGT	CGTTAATCAC	ATAGGCCCCA	1260
ATCCAGTAAA	TCGCCACACT	CAAACCACTT	GAAATCCCCA	TCATGATAGG	ATTCAAAATA	1320
GCCATAAGAC	GGTTGACAAA	CAAATTCAAA	CGGGTCAATT	CATCATTTAC	TGCTGCAAAT	1380
TTTTCATTTT	GATAATCCTC	TGCATTGTAG	GCACGAACGA	CACGAATACC	TGTTAAACTC	1440
TCACGAGTGA	TACTGTTTCA	TTTATCTGTC	AGCCCCTGAA	TCAAGGACTG	TTTTGGAAAG	1500
GCTAGCGTCA	TCAAAACGGT	CGTCATCAGG	ACGTTGATAA	TCCTGCCCAC	AAGTACGGCC	1560
CAGAGCCAGT	ATTCTGAATG	ACCTAAAATC	TTCCCAATAG	CCCAGATAGC	CATAATTGAA	1620
CCACGCGTTA	CCACTTGCAA	GCCCATAGTA	ATCAACATTT	GAAGTTGAGT	AATGTCATTG	1680
GTAGTACGCG	TCAAGAGGCT	AGGAATTGAA	AATTTCTTAA	TCTCTGTCCTG	CGAGTAATCC	1740
AAACTCGGT	TAAAAATATC	ACTTCTCAGC	CTACTAGTAT	AAGAAGCCGC	CACTCGGGAT	1800
GCAAAAAATC	CAACTGCAAC	TACGGACAAG	AAGGCAAGAA	AGGACATTCC	CATCATCATG	1860
CTTGCCGACT	GCCACAACCTC	ATCTAAATTA	GTTTCTTGAC	TACCTAGCAA	ATCCGTAATT	1920

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TTCGAGATAT	AGGTCGGCAC	TTCCAACCTCT	AGATAGACCG	AAAAGCAAGT	AAAGAGAATG	1980
GCTAGTAAAA	TCATCCCCCA	TTCTTTTCTA	CTAATTCTTT	TGGCTAATTT	CTTTATTCTC	2040
TCCTCCTATT	CCCTTGATAT	TTTGCCTGTA	GTTGACCGAG	AACCTTCTCA	AAAATCAGTA	2100
ATTCATCTTC	ATCAATGTCT	TCCATCAACT	GCTTGTCTAT	GCGTTCAAAA	AAAGCCTTAA	2160
CCTGTTGCAT	CTGAGAACGT	GCTTTGTCCG	TCAGACGAAC	AAACTTAGCC	CGCTTATCAA	2220
CAGGACTCGC	CTCCAATTCC	ACCAAACCAT	TTTGCACTAT	ACGCTTAACC	AGATTACTAG	2280
CAACAGGCTT	GGTAATATTG	AGTTCCTGCT	CGATATCTTT	AATCAAGACC	AAGTCTTGGT	2340
TTTTCTCGCG	ATTATCCAAA	AAACGCACAA	CCTGACCTTG	CGGCCCACCC	ATAAATTCAA	2400
TGCCGCAACG	TTTGGCTTCC	TTTTGCACCA	TCAGGTGAAT	TTGATGACCA	AAACGCTTAA	2460
AGACTAACAT	CGGTTTATCC	ATAATCTCCC	CCTTCTAAAT	AAAAATAGTT	CTCTGGAGAA	2520
TAATTAAATT	TCTATGAGAA	CTATTTTCTT	GATTAAAAAA	ATCCCAAGTG	ATTTTCTCAC	2580
TTAGGATCAT	GTTCTATAGG	TTAAATTAAA	ACCCATCTAC	GTTCGTATAA	ATCTTTTGGA	2640
CGTCTTCGTC	GTCTTCAAGA	ACGCTGTAAA	GTTTTTCAAA	GGTTTCAAGG	TCTTCGCCTG	2700
ACAATTCCAC	TTCTGACTGA	GGAATCATTT	CCAATTCAGT	CACTTGGAAT	TCTTCAATAC	2760
CAGACTCACG	GAGGGCAACG	ATAGCCTTGT	GAAGGTCAGT	TGGCGCTGTG	TAAACTGTGA	2820
TTGTACCTTC	TTGTGCTTCT	ACGTCATCCA	CATCCACATC	CGCTTCGAGC	AATTGCTCAA	2880
AGACTGCGTC	CGCATCTTCA	CCTCCAAATA	CAATAACACC	TTTGTTGTCA	AAGAGGTAAG	2940
AAACAGAACC	TGAAGCGCCC	ATGTTTCCGC	CGTTTTTACC	AAAGGCTGCA	CGGACATTGG	3000
CTGCTGTACG	GTTGACGTTA	GAAGTCAAAG	TATCCACAAT	TAGCATAGAG	CCATTTGGCC	3060
CAAAACCTTC	GTAACGTCCT	TCTGTAAAGG	TTTCGTCTGT	GTTTCCTTTG	GCTTTATCAA	3120
TCGCTTTATC	GATAATGTGT	TTTGGCACTT	GGGCTTGTTT	AGCACGGTCG	ATAACGAATT	3180
TCAAAGCTGA	GTTTGATTCT	GGATCTGGAT	CACCTTTTTT	AGCTGCTACA	TAGATTTCTA	3240
CACCAAATTT	TGCATATACT	TTAGAGTTAG	CTCCATCTTT	AGCCGTTTTT	TTGGCTACGA	3300
TATTGGCCCA	TTTACGTCCC	ATTAGGAATC	TCCTTTTTTT	ACATTTTAAT	CTTTCTTATT	3360
ATAACACAAG	TTTTTTTGAT	TTTCACTAGA	GGAAATGGAT	TTTATTAGCA	AATCAAGCTA	3420
GGATAGCACT	TTACCTGCTA	AGATGGTCTT	GCCTTTCTAT	CTTTATCAAC	AGGCACTCAT	3480
CCACATTCAA	AAAACAAACT	AGACCATTAT	CTGCAAATAG	AAAGTTTCAG	CCAAGTTTGA	3540
CAAAGTCAGC	TCAAATTACT	GTTTGAAGTT	TGTAGATATA	AGCGACAAAA	ACAATCATAC	3600
TGCACCTTTT	GTTGACAGTC	TACTCCAGAC	ATATCATAGT	TCAAGTAAAT	ACTTTGAAAT	3660

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TCAACAGTTC	TTATAGGCGC	TATTGTATTC	TAAGAAATCA	ATAGAAGAGT	TTCTAAGCAA	3720
ACCTCTAATA	CTCAATAAAA	ATCAAAGAGC	AAACTAGAAA	GCTAGCCTCA	GGTTGCTCAA	3780
AACACTGTTT	TGAGGTTGCG	GATGGGGCTG	ACATGGTTTG	AAGAGATTTT	CGAAGAGTAT	3840
AATTTACGTG	TTCCCAAGAT	GGAGAAGTTA	GACTAGTACA	CTGGCACTTC	TAAAACATTG	3900
CTAGCAATTG	ATTTGTTCAT	ATTTAATTTT	ATTTTTTTCCA	TAAATGGGTA	TTAGATATAA	3960
ACAGCAAAAT	ATTTCCGATA	CGTGTCGTTC	TTGAATTTCC	AATCATCTAA	AACAAGTAAA	4020
GGATAATCAA	TCCCCTGTAT	ATCAAGGAAT	TGGCTACCCT	TTTTACTTTT	TTACACATTC	4080
TGTTTGATAG	ATTCATTTTA	ACATCACGAG	CATACTCCAA	TGGAAATCGC	TAGGCAAGAG	4140
ATAAACTTTC	AGATATCCGC	AGAGAGATCA	TCGCCTCTTT	TTGTCGCAAG	CATTCTCCTC	4200
TCCTAGTCAT	TTTCTACCTT	ATCTTCTACC	TGAGGATAGA	GAGTTGTTCC	CCAAATAGAA	4260
ATCGTCCGCT	TACGCACTAG	TGGCAAATCG	GTTTTTTTCAT	AAACCGTACG	CCACCATTCC	4320
CAGGCAAGCC	CGGTACACTC	TCTAATTTTG	ACAGAGAGAT	TACGAACATT	CCCTTTTAAA	4380
GGAATACTAG	TGGTAAAGTG	AGCCGTTAAA	TCCTGCCCCAT	TTCTGTCCCA	AGCCTTAGGA	4440
GTCAAGACTT	CCTTACCTTG	ATGATCATAG	GATAATTCAT	TCCAAGTAAT	ATAATATTGG	4500
GCAACATAGG	CACCACTATG	ATCCAGCAGT	AAATCTCCGT	TTCTGTAAGC	TGTAACCTTA	4560
GTCTCAACAT	AGTCTGTACT	ATTTTGAAAG	GTCGCAACTA	CATTGTCACG	TAAAAAAGAA	4620
GTTGTATAGG	AAATCGGCAA	GCCTGGATGA	TCTGCTGTAA	AGCGACTGCC	TTCTTGAATC	4680
AAGTCCTCTA	CCATATCCAC	CTTGCCTGTT	ACAACCTCGG	CACCCGAACT	TGGGTGCCCC	4740
CCTAAAATAA	CCGCCTTCAC	TTCTGTATTG	TCCAAAATCT	GTTTCCACTC	TGTCTGAGGA	4800
GCTACCTTGA	CTCCTTTTAT	CAAAGCTTCA	AAAGCAGCCT	CTACTTCATC	ACTCTTACTC	4860
GTGGTTTCCA	ACTTGAGATA	GACTTGCGCG	CCATAAGCAA	CACTCGAAAT	ATAGACCAAA	4920
GGACGCTCTG	CAGAAATTCC	TCTCTGTTTT	AAATCCTCTA	CCGTTACAGT	ATCTTGAAAC	4980
ACATCTCCTG	GATTTTTTAAC	AGCATCTACG	CTGACTGTAT	AATAAATCTG	CTTAAAATTA	5040
ACAATCTGAA	TCTGCTTTTC	GCCTGAATGG	ACAGAGTTAA	AATCAATATC	AAGAGAATTC	5100
CCTGTCTTTT	CAAAGTCAGA	ACCAAACCTG	ACCTTGAGTT	GTTCCATGCT	GTGAGCCGTG	5160
ATTTTTTTCAT	ACTGCATTCT	AGCTGGGACA	TTATTGACCT	GACCATAATC	TTGATGCCAC	5220
TTAGCCAACA	AATCGTTTAC	CGCTCCGCGA	ACACTTGAAT	TGCTGGGGTC	TTCCACTTGG	5280
AGAAAGCTAT	CGCTACTTGC	CAAACCAGGC	AAATCAATAC	TATAAGTCAT	CGGAGCACGA	5340
TCGACCGCAA	GAAGAGTGGG	ATTATTCTCT	AACAAGGTCT	CATCCACTAC	GAGAAGTGCT	5400
CCAGGATAGA	GGCGACTGTC	GTTGGTAGCT	GTTACAGAAA	TATCACTTGT	ATTTGTCGAC	5460

AAGCTCCGCT	TCTTTCTTTC	GATAACAACA	AACTCATCGG	GTAGCTGATT	ACCCTCTTTG	5520
ATGAAACGAT	TTTCAATACT	TTCTCCCTGA	TGGGTCAAGA	GTTTCTTTTT	ATCGTAATTC	5580
ATAGCTAGTA	TAAAGTCATT	TACTGCTTTA	TTTGCCATCT	TCTACCTCCT	AATAAGTTCC	5640
TGGATTGAGT	TGCATAAACT	CAGACTTGTT	CAGCGAAATC	AGCCGTGGTT	GGACTAAGTA	5700
ATCCAAAATT	TCCTCGTACA	ATTCTTCTGA	GACATTGCGT	CGCCGTCTGG	CTAAATAAGA	5760
AGTCGGAATG	ACCGTATTAT	CCAACATAAA	TACCTTATCT	AAGTCAATCA	AGGTTGGTCT	5820
TGTAAAAGGA	TTACGAGCTA	GATCCGGCTC	TTCTATCATA	AAGTTCTTGA	CCAAACGTCT	5880
GGTCAAGAGA	GCTGGTTTGA	AGGTCTGATT	TTTAACCAAC	TCTTTGTTTT	TAGTCATGCT	5940
GTTGTCAATA	CAGATATACA	TATGATTCTT	CACAGCCAAA	TCGCTACTAA	TAGTCGGAAA	6000
AGGCAAATAA	AGAGCTACAA	CATCTCCTCT	CTTAATCAAG	CAAGAGCACC	CCCTTTTCTC	6060
CTAATGTAAC	ATAGACAGGA	TTGACCAAGT	CTTCTGATTG	ACTCAGAATT	TCCAAAGTTT	6120
GAGTTTGGCG	CGCTGTCAAT	TTAGTAGCAT	CTTGTCTCTT	CAATACAAAA	TGCTTGTCGC	6180
CAATAACCTT	GACAATATAA	TCCTTCTCCA	AAGCTGACTG	GTAAATCCAC	ATCAGATGTT	6240
GTCTGTCCTG	AGAACTCAAG	AGAGAAGGAT	TTTCAAGCCT	CCCGATAGTC	TGATAAAAAT	6300
CAAAAACAGG	AGCTAACTCC	TGCCAATCTG	ATTGGCTAGT	TGTCAAGGCT	AGAAAAAGGG	6360
CTTTGCGAGC	TGATACTTCT	TGGTTAGCCT	TGAGAGTTAC	TTTCCCCTCC	AAGTTTTTTA	6420
GAAATCGGGA	AACTCCAGAA	AGCAAATTTT	TCTCTAACTG	CGAGAAATAA	AAACCTTTCG	6480
TTCCCAGACA	TAAGTCTTTC	ATGTCGCTTT	CTCTAGCAAA	TAAGAGCTCA	AACATTTGAT	6540
AGTAAAAGAA	AAATATCTGG	CACTGGGTCG	CGCTCATCTT	TTCCTTATCG	GCTTCTTTTT	6600
TTAACCAGAG	CAAGGGCGAC	AGGTAGCTGG	ATTGAGACAT	TTCCTCTACC	TCCTACTCTT	6660
TTTTAACTGG	AGCATCTGCA	CTAGCTGCCA	CTTCTTTTGA	CTGGATACTT	TCCCACCTGGT	6720
TAATCTCCTC	TGAGATAAGA	CCTTCGCATG	TCTTGACAAA	TAGGGCAAAA	GCCTTGGTCT	6780
TTCCTGCATA	TTTCTCCGTT	TGGCATTGAT	AGAGGAATTT	TTCTTTCTCC	AGGAGTTGCG	6840
CAGTTTTTTG	GTAAGAAATC	CAATTTTCCT	TTGCATTATA	CAAATTGATA	ATCCCCCTCAC	6900
ACAGCAAGCC	GAGACTGGAT	AAGGCAACCG	AAATCAAACG	GTAGCGATCA	CCTGGCATAG	6960
GAATAGCACA	AAAGACAGCT	ATGAGGAAAC	CTGCCACGAT	TTCTGTTATT	TTTAATACCT	7020
TATAGCGCCT	ACGATGTTGA	ACGCTTTTCT	TTAAAAAATG	AGCTATCTGT	ACGTCTAATC	7080
GCTCTGTCAG	GTACATTTCT	TCTGGCGTCA	TATTCGTAAC	TCCTTTCATT	TACTTTGATA	7140
ATCAGGG						7147

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(2) INFORMATION FOR SEQ ID NO: 24:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 755 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:

CCGCATGGGA TTGGTGCCT TTTGGGCAAT CTCTTTGACC AAACCTGGAAA CATGTTTTAT	60
GCGCCTGCCT TTAAGTGCCT TGTCGGCGGT ACGTCTATAT GATCCTAGTC GCAAAAGTTC	120
CGCGCTTTGG AGCCATTACC ACTATCGGCC TTGTCATTGC CCTCTTTTTC TTGGGAACTA	180
AACACGGTGC TGGTTCCTTC CTTCTTGGA TTATCTGTGG CCTCCTAGCA GATGGAGTAG	240
CTCATTTAGG AAAATACAAG GACAAAACAA AGAACTTCCT TTCTTTCATT ATTTTCGCCT	300
TTAGTACAAC AGGACCAATC TTGCTTATGT GGATTGCGCC CAAAGCCTAT ATGGCTACTC	360
TTCTGGCAAG AGGAAAATCC CAAGAATATA TCGACCGTAT CATGGTCGCT CCAAACCTG	420
GAACTGTCCT TCTATTTATC GCAAGTATTG TCATCGGAGC CCTAGTGGGT GCCTTGATTG	480
GACAAGCCTT GAGTAAAAAA TTTGCCCAGA AAATCTGATC AGTTAAAAAG AGCCACGCGG	540
CTCTTTTTTA TTTATGGCTC AATTTCTTAG TCAAGAAATC TCCCAAGAAT TGGATTGCAA	600
AGATAATCAA AATGATAATA ATGGTTGCCA AGATGGTCAC ATCGTGATTG TAGCGGTAA	660
ATCCATAAGC GATGGCTACG TTACCGATAC CACCAGCTCC AACCACACCG GCCATAGCTG	720
TTtCCCAACA AGGGaAtCAA GGTcACAGTC GTCAC	755

(2) INFORMATION FOR SEQ ID NO: 25:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 3010 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

TTCAATTGGT ATCTCAATCA ACGGTCTTCA CATGGTTTCA ACTGGTTTGA CTCTTGAAAA	60
AGCGAAAGCT GCTGGTTACA ACGCAACTGA AACAGGCTTT AACGATCTTC AAAAACCAGA	120
ATTCATGAAA CATGACAACC ATGAAGTAGC AATTAAGATT GTCTTTGACA AAGATAGCCG	180
TGAAATTCTT GGTGCCCAAA TGGTTTCACA TGATATTGCA ATTAGCATGG GAATCCACAT	240
GTTCTCACTT GCTATCCAAG AGCATGTGAC AATTGATAAA TTGGCATTGA CAGACCTCTT	300

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CTTCTTGCCA	CACTTCAACA	AACCATACAA	CTACATCACA	ATGGCTGCCC	TTACGGCTGA	360
AAATTAAAAA	TGAATGAGCT	ATCTGGCCTT	AAGTTAAGGT	CAGATAGTTT	TTAGCTAATT	420
TGTCCCCATA	CAATTATAGT	TTTTTTATCT	TGTGCTTCAT	TCTGTTCTGA	CTTAAAATGA	480
AAAGGTAGCT	ACCAATACAA	ATGATGAGGA	TAAAACAAAT	GACTGAAAAT	CGTTATGAAC	540
TAAATAAAAA	CTTGGCACAG	ATGCTCAAGG	GTGGTGTTAT	TATGGATGTG	CAGAATCCTG	600
AACAGGCTCG	TATCGCAGAA	GCTGCTGGTG	CGGCAGCTGT	GATGGCCTTG	GAACGAATTC	660
CGGCTGATAT	TCGTGCAGCT	GGAGGAGTTT	CCCGCATGAG	CGACCCAAAG	ATGATTAAGG	720
AAATCCAAGA	AGCGGTTAGT	ATTCCAGTAA	TGGCTAAGGT	CAGAATCGGG	CATTTTGTTG	780
AAGCTCAGAT	TTTAGAGGCT	ATTGAAATTG	ATTATATCGA	CGAGAGTGAA	GTTCTATCTC	840
CAGCTGATGA	CCGTTTCCAT	GTGGACAAGA	AAGAATTCCA	AGTTCCTTTT	GTCTGTGGTG	900
CTAAGGATTT	GGGTGAAGCC	TTGCGTCGTA	TCGCTGAAGG	TGCTTCCATG	ATTCGTACCA	960
AAGGAGAACC	AGGGACAGGG	GATATCGTCC	AAGCTGTTTC	TCATATGCGT	ATGATGAATC	1020
AGGAAATTTC	CCGCATTCAA	AACTTACGTG	AGGACGAGCT	TTATGTTGCT	GCCAAGGATT	1080
TGCAAGTCCC	TGTAGAATTG	GTCCAATATG	TTCATGAACA	TGGAAAATTG	CCAGTTGTAA	1140
ATTTTCGCTG	TGGAGGTGTT	GCAACGCCAG	CAGATGCTGC	GTTAATGATG	CAATTAGGGG	1200
CAGAGGGGGT	CTTTGTCGGT	TCAGGTATTT	TCAAGTCAGG	AGATCCTGTT	AAACGAGCGA	1260
GTGCCATGTG	TAAGGCTGTG	ACTAACTTCC	GTAATCCTCA	AATCCTAGCT	CAAATCTCTG	1320
AAGATTTAGG	AGAAGCCATG	GTTGGTATTA	ATGAAAATGA	AATCCAAATT	CTCATGGCTG	1380
AACGAGGAAA	ATAGATGAAA	ATCGGAATAT	TGGCCTTGCA	AGGGGCCTTT	GCAGAACATG	1440
CAAAAGTGCT	AGATCAATTA	GGTGTCGAGA	GTGTAGAACT	CAGAAATCTA	GATGATTTTC	1500
AGCAAGATCA	GAGTGACTTG	TCGGGTTTGA	TTTTGCCTGG	TGGTGAGTCT	ACAACCATGG	1560
GCAAGCTCTT	ACGTGACCAG	AACATGCTAC	TTCCCATCCG	AGAAGCCATT	CTATCTGGCT	1620
TACCAGTGTT	TGGGACCTGT	GCGGGCTTAA	TTTTGCTGGC	TAAGGAAATC	ACTTCTCAGA	1680
AAGAGAGTCA	TCTAGGAACT	ATGGATATGG	TGGTCGAGCG	TAATGCTTAT	GGGCGCCAAT	1740
TAGGAAGTTT	CTACACGGAA	GCAGAAATGA	AGGGAGTTGG	CAAGATTCCA	ATGACCTTTA	1800
TCCGTGGTCC	GATTATCAGT	AGTGTGGTG	AGGGTGTAGA	AATTTTAGCA	ACAGTGAACA	1860
ATCAAATTGT	TGCAGCCCAA	GAAAAAATA	TGTTGGTAAG	TTCTTTTCAT	CCAGAATTGA	1920
CTGATGATGT	GCGCTTGAC	CAGTACTTTA	TCAATATGTG	TAAAGAAAAA	AGTTGAGATT	1980
GAATTTCTCA	ACTTTTTTAC	ATGTAATAAA	CAATAGCGAT	GTATTGAAGT	GCGGACGCAG	2040

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CTAGGATAAA	GAGATGCCAA	ATCATGTGGA	AATAAGGTTT	TTTCTTGGCA	TAAAATCCAG	2100
CTCCAACGT	ATAACAGAGT	CCGCCAGTTA	CCATGAGACT	CCAGAAAACG	GGTGTCTGTT	2160
GACTGATAAT	GGCAGGAATG	ATAGCCAGAA	CCAACCAGCC	CATAATCAGG	TAAAGAGCAA	2220
GGCTAAATTT	CTCATTGACC	TTTTTTAGCA	AGATTTTATA	GAGAATACCA	AAGATGGTCG	2280
TTCCCCATTG	GATGACAATA	ATCAGATAGC	CAAACCAGTT	ATTCATCAAG	GTCAAGACAA	2340
CGGGCGTGTA	TGAGCCGGCA	ATGGCAACGT	AAATCATAGA	ATGGTCAATG	ATTTCGCAAAA	2400
CATATTTGTG	GGTCGAACCA	TAGGCCATAG	AGTGATAAAT	GGTGGATGAT	AGGAACATGA	2460
GAAAGAGACT	GATGACGAAA	ATGGAAACGC	CGATAGAGGA	TAAAAATCCG	TGTGCTTCAT	2520
AACTATAGAT	GGATGAAATA	GGCAGCAAGA	TAAGCATGAT	GACTGCACCC	ACAGCATGGG	2580
TCACGCTATT	AGCAATCTCC	TCTCCAAAAC	TGAGTTGTTT	GCTGAGTTTA	AGACTAGTGT	2640
TCATTGGATT	ACCTCCTCTT	GAGTATGATC	GATTAAGTCT	AGAGTTTGAT	GATAGAGTTT	2700
AACGGTTTGG	CAGCTGGTTT	GGATAATAGG	GTTAGCTGGG	TCAATTCCCT	GGTTCATGTA	2760
GTCCACAAAA	GCATCGTAGA	GTTGGTCTGA	ACTTGCTTGA	GTTTGTAGAG	TATTAAGTGT	2820
CTGGGCTATT	TCTTGAATAG	AAAATACAGA	CTTGAGGGTT	GTGATAGCAA	TCAAACGGGC	2880
AATCTGTTGG	CGTTGGTATT	TTTTTTTGTC	AGGCTTTGTC	AGGTAACCAT	TTTTCACATA	2940
ATTGTTGACC	ATAGATGCTG	TTAGGCCCTT	GTCTTTATTA	GGAGAGATAG	GGGCGCAGAC	3000
CTGATTGACA						3010

(2) INFORMATION FOR SEQ ID NO: 26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 15213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 26:

CATAAATCGG	TGCAATAAAC	TTAATAGTGA	AGTAGCCATT	TCTTTCGTAT	TTACCTGAGG	60
CATATTCCTT	AGACGAAAGA	ATATTATTAT	CAATCAAATC	ATTGAATGAA	CGTAGTCTTT	120
CAACTTCTTC	TACTGTTAGA	TTTCTGACAA	CATTTGTTGC	ATAGACCTTA	TTTCCATCAG	180
GATCAGGATG	GTAATCATTT	GTAATTTTTC	TAAGAAGTTG	TTGTTTTTGA	TTCGTATCCA	240
ATTTAAGAAT	TGAATTTTCT	TCGAGATATT	CCAACATATA	AACAACGTCA	AACATGTTGT	300
GGACATATTG	CTTCAAATCA	TCTGCATTAT	TAAATCTTGT	AGTTGGATCA	AGTACTTGTA	360
ATCGTCGACT	TTCTGTACTA	TCAGATTTTG	AATGTTTCAA	GATGGAGTTG	ATGGTAATGG	420

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TCGCATCATC	TGGATGGTCT	GGTGCTTGTA	ATAATCCTTT	AGCAAAGAAC	TCTGGTCCCA	480
AGCCACTTCT	TCGACCATAT	CCTCCAAGAT	AAATGTCCTG	ATCTGAGTCA	TGTGTCATCT	540
CATGCGTATA	AGTAATAGCT	CCATCCTTAT	CCAACATTCG	ATAACCCATA	TAATAAACTG	600
CATCACCTGT	AGCATAAGCA	CCGTGTTGAT	TATGCCCAAC	TTTATTTCCTA	ACAGGTCCAA	660
AGAAATGTTG	CATTGCAGGA	TTTGGATTAT	CAAAATCTGC	CACTTCTGTA	GCTTTCCTTA	720
CGGTATTATC	ATCGCCAAAT	TTATAAGCAT	CGTAAAGCAA	AATATTTCTA	TAAAGTTTTT	780
CACGTGCATT	GTCGTCTAAA	ATACGATACC	AATAATCGTA	GTGATCTCGC	TGACGTTTGG	840
CTGTTTCACG	CGCATTTTCT	TCAACAAAAT	CATTGAGAGC	CTTGCCCGCT	TTATGGTCAC	900
TACTGCGGTA	GCGATCATAA	GCTCCAAATC	CTAGACTAGA	CATGGTCGAG	ATGACAAATA	960
CGGATCTCTC	TGGCAAGGTC	AGGAGAGGCA	AGACCATATT	GCGGTATTTT	CATGTGGCAC	1020
TCGTGATACG	ATCATAAACA	CCGATAGAAT	ACTTGGTGCC	AGCTAACCCCT	TGCTTCGTTT	1080
TCACCTCTTC	GATAGTGGAT	TTTTCTTCGA	CAATGTAAGC	CTTAGTCTCT	GATTTAAACC	1140
AGTCATTATT	GCTTGTATTT	GGTAAAAAGA	CTTTTCGGTA	ATGTTCCAGC	GTGCTAAACA	1200
AATCTGTCGT	TCCATGTTGA	CTGGCAAGAC	TGATACCATA	AGTATCGACA	TTATTCTTAG	1260
CTAGAAGATT	GTAAAGCCA	GATTTACCCA	ACTCAATCAG	AGTATCTAAT	GGTGAAGCAT	1320
TCCCCTTACC	AAAGAAGTCC	AAATGGTACA	GAAGTAGGTC	TTTGACATTC	ACCTGACCAT	1380
AGCTAAAGTT	ATACCACCGT	TCCAGATAGG	TCAAGCCAAG	TAGCAAGGCT	TCCTTGTTGC	1440
GTTTGATTTT	ATCTACAAGA	TAACCTTCAG	TGACGGGGTT	AGCACTAGCC	AGTCCAGCAT	1500
CCGCTGACAA	GAGTTTTTTC	AAACTGTCTT	CCAGTTGTTG	TTTTGTGTTG	GCGAACTGGT	1560
CTTCTAGATA	GAGCTCAGTT	TGCTTGACGT	TTGGAGAAAT	ACCCAGCGTC	TTTCTGATGG	1620
CTTCTGAATG	ATAGTCAACC	TTTTGTAAAGT	CAGGTAAGAC	TTGCTTGATG	ATAGAGGTTT	1680
GGTCATACAG	GAATTGGTFT	GGCGTATAGA	GAAGTCCAGT	ATTGCCCAGA	CTATATCTTG	1740
CTAATTTGGC	GAAATCATTC	TGGTATTTGA	GATCCAGCTT	CTCAGATAAA	TCATCCTTGT	1800
AGTGAAGCAA	GAGTTTGTTT	GCAGTCTGTT	TGTTAGAAAC	AATGTCTGTG	ATGACTTGGT	1860
TGTCCTTCAT	CATGACTGCT	GACAAGAGTT	CTTTTTGATA	TAAAAGACTG	TTCTCATTGA	1920
CCAGGTTTCC	GTATTTGACG	ATGGTTGCCT	TGTTGTAGAA	AGGTAGCAAT	TTTTCAATGT	1980
TTTTATAAGT	CAAGTTGCGC	TTAGCTTGAT	AATAGGCCAC	CTTAGAAAAA	TCACTGTCTT	2040
TTTTGCCACT	TGTTGAAAGT	GGCTCCACTG	TTGGTAAAAT	GAGAGGATTG	ATTTCTGCTT	2100
TTTTGCTTGC	AATTTGAGAA	GCATCTAGCA	TTGTTCCCTCT	TTCTTCAAAG	GATTCCTTGC	2160

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TGACGACCTC	ATCCTTGACC	AAGGTGACAT	TGTAGACTCT	GTTGGCCTTG	CTGCTGAATG	2220
TGTCCTTTAC	CTTCATTTTCG	TTATAGTGGT	AACCAGTGAT	GGCATTTCCG	TTGGTTACAT	2280
TAACATCGCT	GAGAACATTG	GTCAAAC TTC	CAGCATGCCT	AACATCACCA	GAAGTTCGAT	2340
CCCACAAATT	GCCTGCCACT	CCAGCGACTC	TACCAAAGTG	CTTGACATTG	TTGATATCAC	2400
CTTCAGCATA	GCTATCTTGG	ATCTGTGCAT	CTCGGTCTAC	TAGGCCTGCA	AGTCCACCCA	2460
CAGTCTGATC	TGAAGTATTT	GTGTTAGATG	AAATGGCTAC	TGTCGCTTTT	GACTTAGTAA	2520
GTAAAGCCTT	GTCACCTGTC	AAATGACCGA	CCATACCACC	GATATTGTAG	GCAGCAGTCG	2580
TTTCATAAGT	GTTGATAATT	CTTCCCTTGA	AACTGCTCTC	TGTGATGCTT	GATTGCTCAG	2640
CCTTAGCCAG	CAAACCACCG	ATACCACGTT	CACCAGCCAG	AACACCATCG	ACGTGAACTT	2700
GCTTAATTTT	TGTGTTATTC	TGAGCTTCAT	TTGCCAGTGA	ACCGATATCA	TCTTTCCCTG	2760
AAATAGCAAC	ATTTTTTTAGA	CTCAGTTTTT	CTACTGTAGC	ACCACTCAAG	TTTTCAAACA	2820
GAGGTTTTTT	CAAATTATAG	ATAGCATAAT	TCTTGCCATC	TTTTTCACCG	ATTAAACGAC	2880
CAGTAAAGGT	GTCCTTGATA	TAGGATCTTT	CATCAGGACC	AAGCTCCACT	TCGTTAGCAT	2940
TCAGGCTGGC	CGCTAAATGA	TAGGTTCCAG	AGGGATTTTG	GTTTATAGCT	TTGACCAGAT	3000
TACTAAAGGA	AGTAAAGTTT	GTTGTTTCTT	CTGTTCCCTT	CTTAGCTAGA	TAGAAGGTAA	3060
AATTATCTTT	ATATCTGCTT	TCTATCTCCT	GCTGAAGCTT	CTCTACTTTT	GCTGTGATTT	3120
TATAAAGGAT	TTTATCATTT	TTTCTTTCCT	CTGATATTGA	TGCTACTGGT	AGGTATACAT	3180
CTTTGAATGA	AGAAGATTTT	ACTTTAACAA	AGTAGCTATT	TGGATTGCTT	GGAAC TTGCT	3240
CTAACGAAAT	GTGTTGTTTA	TAAGTACCAT	TTGACAAACT	GTATAACTCT	AGGTCGGAAA	3300
CATTTCTTAA	TTCAAGTGTT	TTCTCTGGTT	CTTCTACCTT	TTTATCAGGG	TCTAGTTCAT	3360
TTTCTTGTTT	AATTTCTTCG	TTTCCATTTG	AATTGGATGT	GTTTGATTCTG	GTTGAAACAT	3420
CCTCAGTTGA	ATTTCCGTTT	GATGGTTC TG	GTTCTGTTTG	TCCATTCTCT	GATGTTGTAT	3480
TACCTGAATT	TTCTGGTTTT	GTTGCAGTTC	CGTTTTTTTC	TGGTTGATTT	GATTCTTCAA	3540
CTGGTGTTTT	TGAATCACTA	GGTTTATTGG	ATACTTCTCC	AGTATTTTCG	TTAGCTATTT	3600
TCCCAGAGTT	TGTTTGTGTT	TCTTCTGCAG	GTTGAACTGG	TTTTTCTGTT	TCTTGATT TG	3660
AGGTACCTTC	TACTGTGCCT	TCATTTGGAT	TTACTGGAAC	TTCTTCTACA	GTTTTTTCTG	3720
AATTTTCATT	TTTAGAGTCA	TTATGTTCTG	GTTTATTTGA	TTCTCCAAC T	GAGGTGTCTG	3780
AATCACTAGG	ATTACTGGAC	ACTTCCCCAG	TATTTTTGCT	AGATGTATCT	GGTGATACTT	3840
TCTCTGAATT	CGTTGTTGAT	TCTTCTGCAG	GTTGAACTGG	ATTTTCTGCT	TCTTGAATTG	3900
AGGTTCCCTC	TGTAGTACCT	TCATTTGGAT	TTACTGGTGT	TTCTTCTGTT	GGTTTTACTG	3960

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GAACCTTCTTC	AGTTTTTTTCT	GGACCTTGTT	CTTTGGTCTT	CTCAACCGGA	GTTTCAGGTT	4020
TTACTTGCTC	AATATTACCC	TTATATTCTG	GAAGCGGTGC	TACCTGCTCT	GGTTCACCTT	4080
TATCACTTAC	CACAGTATCT	GGCGACTCTG	GTTGAACCTC	AGTCTCACCT	TTGTCCGGTCA	4140
CAACTGCTTC	GGGTAATGTA	GGTTGAACTT	CTGGTTCGCC	TTTGTCACTT	ACTACAGCTT	4200
CGGGCAACTC	AGGCTGAATT	GCGGGTTCAA	CAATAGCTCC	AGACTGTACG	TCCTTATGTT	4260
CTACACCAGT	CTCAGGTTGT	TCCTTTATAA	CTTGAGTTTT	TTTAGTACCT	TTTTCGACTA	4320
TTCTTGGACT	AGGCGCAGTC	GTTGAAGTTG	AAACAATTTT	TCGCGAAACT	TCTTCCTTGT	4380
TTACAGAGAA	TATTCTGACG	ATTTCAACTT	TCTTACCTAA	TTTACCTTCT	TGTTTTACTC	4440
TTACAGTTCC	TTCAGCTAAA	TCAGGATTTT	CTTGAATTTT	TTCTTGAAAA	TCTATTTTTG	4500
TCTCCATAGT	TTCCTCACGA	TATAAGAGTT	CAGGTTTGTT	CAATTGACCT	GATAAACTT	4560
CATCCTGTGG	ATTTAATGTA	TTTACCCCAG	TCTTTTCTTT	TGGAGAAATC	TTCTCCTCTT	4620
TCTTCGTTTC	TAGATTCTTA	TGTTCCGGCTA	ATTGTTCTTG	AGAATCTGAA	GATTGTTTCT	4680
CTTCTTTTCT	TGGATTGATT	AATTCAGTAG	AGAAAGGTTT	TTCAACTACT	TGAACTTCTG	4740
TCGGCTTAGT	TGAAGAAACA	GGTGTGTTGTT	CCTGAATAGC	TTGTACTGTT	GATGGATGGT	4800
CTACAAAATT	CGGTGTAACA	TTATAATCCA	CCTTTTGTTG	TTTTGTAGGA	GTGGCAACTG	4860
AACTCTTTTG	ATTACTTACT	TCAGACTCAG	AAGTCGTTTT	TCCCTCTTTG	ATATATCCAA	4920
TATAAGTGTA	ACCTGAAATC	TCTTTAGGAA	GAGGTAATTT	TTCTCCAGAG	GTCAATTCAT	4980
AGTCCGTATT	GTAATTTAGC	AAAAGATGAT	TTTCTAAAGC	ATGGACTGAA	ACTAAGACAC	5040
CATTTTCCTAT	CCCTGCAACC	AATACTAAAT	GTAATACCGT	TTTATTCTTA	ACCTTTTTCT	5100
TGGAAACAGC	AAAAATTAAA	ATTCCCATAG	CAGCTAAGCT	AGCACCAGCA	ACTAGGGCTT	5160
GCCTCTCATT	CTTGCTTCCA	GTATTTGGCA	ATTCCGCCAG	TTGATTTTGA	GAATTTAACT	5220
TATAACAAG	ATAATAAGTT	TCATCATCAT	TCTCCACGTA	TGTCGGAATA	TCATAGACAA	5280
GCTGCTTCTT	TTCTTCTGAT	GATAGCTCTG	AATCTGCCAC	ATATTTATAG	TGAACTCCCG	5340
CAGTTTCTTG	AGCATCCACA	GATGAACTAG	CTAATACAGA	CATAAAAAAT	AACTTGAAA	5400
TCGTTGCAGA	TACAAGTCCT	ACTGATAATT	TTCTAAATGA	AAAACGCTCT	TGTTTTTCAC	5460
CAAAATACTT	TTCCATTATT	CCTCCTTGAA	ATAAAATTTA	TATATGTTAC	AAAGACCTTT	5520
ATTATATTAG	TGTATTATCT	ATTATCTATA	GAAAAGGCAG	TATACCTTAA	TTATACTCTT	5580
AATTTACAAA	AAAGTCTTAA	AATTGAGATG	CGCTTTCATA	CTTTGTTTTA	TATTATTTGG	5640
AGGTACAATA	ACACCTACCA	TGAAATTTAC	ACGGTAGGTG	TTACTCATAT	CACTAATCGT	5700

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TCTAAAAATG	GTTTGAGGCA	GTTGAGGAGA	ATTCCTTCTA	TCCAGCTTCC	TTGTGCTGAT	5760
GAGCGATGGT	CTTCCTGCAG	GCTTTTTTTT	AGAAAATCTC	GGACTTG TTC	TGGTGCGATT	5820
TCAAATTCAA	AGGCTTTCAT	TTTATAGAAA	AAGTCGATGA	GATGATCTGA	CAGGTATTCA	5880
GTTGAAAAGG	GTACTTCACC	ACTTTTTTCTA	TATTCTAATA	AGAGTCTAGA	AAATCGAGCT	5940
TTTTCTTCAG	GAAGCTCACG	AAAATAGGAA	TTGAGGATCC	AAGTCTGCTT	CTGTTTTCTT	6000
TCAATTGGAT	CCTGACTGGC	AATTCGTTGG	TCTTTTTTCCA	GCTCTTTTTG	GTATTGTTTG	6060
GCCTTGATAG	CTCGTTCTGC	TCTATTTTTTA	CCAAAAAGAA	TTTTTTTCCCA	CTTGCGTTCT	6120
TCTTGAGTCA	GGGTCTCTGT	AAAGCCAAAG	TAATCTTGAT	AAGCACGCTC	TGCGGGTCCC	6180
ATGGCTAGAA	CCAGATTGTC	TGCATATTGC	TTGGCGATTT	TATCCCTCTT	CTTGCGTTCT	6240
TTCTCTGCCT	GGATACGGAG	TTCTTGTTTCG	TAGTCAATTT	TCTCCTTGCC	TAGCTTGACA	6300
AGGTAGAGTT	GGTCATCCGA	TTTCCCAAGT	AAAAAGGGTT	TGATACACTT	TTCAAGGACT	6360
TCTTCCATCC	GAGCCTTTTT	CTTTGGTTCC	GCCTTGGTCC	AACCTCCTCC	CTGAAAGACT	6420
TCTAGGAAAA	GCTGGTAGTC	TCTCTCAGGC	GCAAATTGAT	TGCCACGATT	GGGTTTGAAA	6480
ACACCTTTTT	CCCAGAGCCA	TTTTAGAAGT	CGCTCGTCAA	AGTTACTTTT	ATTGACCTTG	6540
ATTTTTTCCT	TTTTCTGAGC	TTTTCTGGTT	AGATTTTCAA	CCTTTCTGAG	CAGTTTTTCT	6600
TCCTCTTCCA	ATTGCTGGTC	AAGGGACAAT	CGATGAAAAT	GACGAACACA	GTCGCTACCA	6660
ATTGGAAGA	GGCGTTGGCC	TGTGACACCG	TTAAAGAGTT	CATAAGCGTA	TTTGATGGCA	6720
TTTCCACAGA	CACAATTGCT	ACGGCCGATA	CCGTTAAAAA	TAAAGGAAAC	TTCATTCCAT	6780
TCCTTGGTAG	CTTGTTCCCA	AGTATCCGCT	TTCGAAGCCT	GTAAAACTGC	ATCGTGCAGG	6840
GATTTTCTAA	CTGGAAGTGT	CATGAGGTCT	CCTTTCTAAT	ACTCAATAAA	AATCAAAGAG	6900
CAAAC TAGAA	AGCTAGCCGC	AATCAGCTCA	AAACACTGTT	TTGAGGTTGT	AGATAGAACT	6960
GACGAAGTCA	GCTCAAAACA	CTGTTTTGAG	GTTGTGGATA	GAAGTACGTA	AGTCAGTAAC	7020
CATATATACA	GCAAGGCGAA	GCTGACGTGG	TTTGAAGAGA	TTTTCAAAGA	GTATAAGTTA	7080
TACTTTTACA	ACTTGAACCT	CGTCTTTACC	GAGTAAAATC	AAGTATTTTT	CAATATTTTC	7140
AATCGAATAG	GCTCGTGATA	AAGCCTCTTC	GTATAGAGCT	AACTGACCAC	GATAGCGGTC	7200
TACGAGTTGA	CTTGTTTCAT	CATAGCGGTC	TGTCTTG TAG	TCGAACAGAA	CAATTTTGTT	7260
TTCGTAAAGC	AGATAGCCAT	CAAGGATACC	ACGGACAACA	AAGTCTTCCT	GACTCTTTTG	7320
GTCTCGTTTG	AGCATGGAGA	AAGGTTGCTC	GCGATAAAGA	TGGTCGGTAT	TAGCAAGAAT	7380
TTCTTGACCG	AGTACTGTGT	CAAAGAAAGC	AAGAATTTTA	TCAAGATTGA	TCTTGTCTCT	7440
GACAGCTTGG	CTAGTTTGAA	CTTGTTTGAG	TGTTTCTGTT	AGGCTAGCAA	GGGTTAGTTG	7500

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CTGGCTGAGG	TCAATTCTCT	GCATGAGTTC	GTGAGTAGCA	CTACCAATCT	CAGCTCCAGT	7560
TACCTTTTCT	TTGGTTGAAA	AATCTGGCAA	ATCGAAGCTG	ATTTTCTTGC	CTACTGACTG	7620
ACCTTGACCA	GCAATCTCGA	CACCTTCCAT	ATCCATAACT	GGTTCGTAGA	ATTTCTTGAT	7680
TTGACTTGGG	GTTTGAACAC	TAGGAAGTTC	AATAGCTGCG	CGGTGAAGAG	TATTATAAAC	7740
TTCCACCTCC	TTCAGCATTT	CCAGAGCTTC	TTTGATGGTA	TCTGACTGAC	GATTGTCTGC	7800
TTGGGAGCTA	TCTTGAGAG	GACTCTTGGT	TTCCAACCTCT	CCGATAGCTT	CTCTGGTCAA	7860
CTGATCTTCG	CCAATAAAAC	GATAACTAAA	GTTGAGCTTG	TCCTTAGTAA	ACACTTTACT	7920
GATAGCCCAA	AGCCAATCTT	GGAAATTCCG	TGCTTGCAGT	CTAGTATTGC	TATTTAGTTT	7980
CCCATTTTTG	GCTGCTGGGT	ATTCCTTGGA	TTCCAGCTTT	TCACGAGAAC	CCTTGCCGAC	8040
AAGATAGAGC	TTTTTCTCAG	CCCGCGTCAT	AGCAACATAC	AGCAAACGCA	TCTGCTCAGA	8100
ATAGCTTGCT	AGCTGTAATT	CCTCTTCGTT	CTGCCTATAG	GTCAGACTAG	GAATGGAGAG	8160
TTTGATGGTT	TTAGGATAGT	GGTCTTCTAC	TGCCCCTGTC	TCCATCTTGG	CAATATATTT	8220
GACACCAAGA	CCATTCTGAC	GACTGAGAAT	GACTTCTGAC	ATAGAGTCTT	GCTTGTTGAA	8280
ATCTTGATCC	ATATTGAGGA	TAAAGACGTA	AGGAAACTCC	AGCCCTTTAC	TCTTGTGGAT	8340
GGTCATGAGC	TCTACTGCAT	CTTTTGGCGG	TGCGACGGCC	ACGCTTGCCA	AATCGTGCTG	8400
GGCTTCTAAG	ACTTGGTCAA	TCATACGAAT	AAAACGCGAC	AAACCTTTGA	AATTGCTCTT	8460
TTCAAATTGA	TCAGCACGCA	GTGCTAGGGC	ATAGAGATTG	GCCTGCCTAG	CAGGACCATT	8520
CGGCAAAGCC	CCAACATAGT	CATAATAAAA	ACGGTCGTTG	TAAATCTTCC	AAATCAAGTC	8580
ATAGAGAGAG	TGGGTTTTTG	CATACAAGCG	CCAAGAAGCT	AGGATATCCA	TGAATTGCTT	8640
TAGTTTTTCA	GCTAGAGCTG	TGTGAATCAA	GCCTTTTTGA	CTACTTGCCA	TTTTTTGTGC	8700
ATTGACCAGT	TTCTCATAGA	GATTTTCGTG	GACTTTATCC	TCTGCTTTCT	GAAGGGACAA	8760
ACGTGCTAGC	TCATCCTCAT	CAAAACCAAA	CATTGGAGAC	TTCATAAGGG	CAACCAAGGC	8820
GTAGTCTTGC	AGGGGATTGT	GAATGACACG	AAGAGTGTCT	AGCATGACTT	GCACTTCTAG	8880
GGATTGGAGA	TAATTGTTTT	GCTCTCCGTC	AGTTTTGACA	GGAATTCCGT	ACTCAGACAG	8940
GGCGAGGAGA	ATCTGGTCAT	TACGACTGCG	GCTGGAGGTC	AGAAGGGCAA	TTTCCTTAAA	9000
GGCAACACCT	TTTTCTTGAT	GAAGTTTCAG	AATCTCCTTG	ATAACTAAGC	GCATTTGCCC	9060
TGTTAGTTTC	GTTTCTGTTT	GACTCTCTTC	TTCCCTCACCT	GTATCGTCCT	TGTCGTAGAG	9120
GAGAAATGCT	GCCTTGTTGT	CTGGATTGGG	AGTCAGTTTG	GTATTGGCAA	AAACAAGCTG	9180
GTGCTTGTTA	TCATAGTTGA	TTTCGCCGAC	CTCTTGGTCC	ATGAGACGTT	CAAAGACATC	9240

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ATTGGTTGCT	GACAGCACTT	CTGAACTACT	ACGGAAATTT	TCCTTGAGGA	TAATGAGCCT	9300
GCCTTCTTGG	GGATTTTGCG	CATAGCGTTG	GAATTTCTCA	TTGAAAATCT	GCGGGTCTGC	9360
CTGACGGAAA	CGATAGATGG	ATTGCTTGAT	ATCTCCCACC	ATAAAGCGAT	TGTGGCCATT	9420
AGACAACAAT	TCCAGCATCC	GTTCTTGAAT	ATGGTTGGTA	TCCTGATACT	CATCGACCAT	9480
GACTTCATGG	AAGCGCTCCT	GATAAGACTC	ACGAACTTGT	GGGAAATTCT	CTAAAATCTC	9540
AATGGTGTA	TGGCTGATAT	CAGCGAATTC	GAAGGCATTT	TCCTGTCTGT	TTCTCTGACG	9600
ATAAGCCTCT	ACAAAATCGC	TCATGAAAGA	TTGGAAGGTT	TTAGCTAGTT	TCCAAGTGTC	9660
TCCATGATAA	CGTTCTTGAT	AGTCGAGAAT	CGCTATCTGG	TCTGATAATT	GTCCTAGTTT	9720
AGCAAACCTG	GTCTTTCTCT	CTTCGTTGTA	GGCATCAGCC	AGGGGCTTCA	AATCAGCCTA	9780
CGGCTGGCAT	TAGTCAGAGC	TCGACCGTTT	TTCTCCTTAG	AGATGGCGAC	AACACGCGCA	9840
AGCACTGCCT	GATAAGCCTG	ACTATCGGAC	TCCTGATTTA	GGGAGCCAAT	TTCATCCAGA	9900
ATTAAC TGAA	CATTTTCTAA	ATAGGCAGCC	TTTGCAAAC	CCTTGGCATC	GTTATCCAGA	9960
TGGTAACGGA	AAAAGCTTTC	CAAATCCCAA	AGGGCTTGTT	TGATTTGCTC	GGTCAGTTTT	10020
TCTTTTTTAC	TGGTAAAATC	AGCTTTCTCA	AATCCTTTGA	GGAAAGATTC	ACTCAGCCAC	10080
TTTTTGAGGAT	TACTGGTGGA	TTGGAGGAAG	TCATAGATTT	TATAGACCTG	CTGGCGCAGA	10140
CCCCGTTCGT	CCTTGCCACG	CCCAGCAAAG	TTTTTCAGCA	AATGACTAAA	GGTCTCTTTC	10200
TGTTTACCTT	GGTAATGCGC	TTCAAAGACC	TCATGAAAGA	CTTCGTTTTT	GAGAATAAGT	10260
TGCTCGCTTT	GGTTTTGTAA	AATACGGAAA	TTAGGTGCAA	TATCAAGCAG	ATAACCATGT	10320
TTGCCAAGGA	ATTTTTGTGT	GAAAGAATCC	ATGGTTCCAA	TGGCAGCGTT	GGGTAGGTCT	10380
GCCAACTGGC	GACCCAAGTG	TTGTTTGAGG	TCGACATCAT	CTGTTTCTTG	GATTTTCTTG	10440
CTGATTTTTT	TCTCTAAACG	TTCTTTAAGT	TCAGTTGCAG	CCTTGACGGT	AAAGGTTGAG	10500
ATAAAGAGTT	GAGAAATTTT	GACACCACGC	GCCAATTGGT	CCAGAATGCG	CTCTGCCATG	10560
ACAAAGGTCT	TTCCAGAACC	AGCCGATGCT	GAGACCAGGA	TATTCTGGGC	AGAAGTGTAG	10620
ATAGCTTCGA	TTTGCTCGGC	AGTTTTCTTC	TGTTCTTGGC	TCGAATTTGC	TTCTGCTTCT	10680
TGCAGTTTTT	GAATCTCCTC	CTCACTTAAA	AAGGGAATAA	GCTTCATCGA	TTCAACTCCT	10740
CTCTTATTTT	TTCAAGCCAA	GCTTGCTTGA	GTTTTTCTCC	GACCAGACGC	TTGCCATCAG	10800
CTAGGTCCAA	CTTTTCTAGG	AAACGGGCTT	GGCCCAGATG	GTAATTGGCT	TCAAAGCCTG	10860
TAATAGCCTG	ATGTTGCTGG	ACGTATGGGG	CAATGCTTCT	GCCATTTTCA	GTATAAGGAT	10920
TGATGGCGAA	CCGGCCTGCT	AAAATCTTCT	CAGCAGCTTT	CTTGTAAGA	TAGGCATTGT	10980
AGTCCAGTAG	GAGCTGAAAT	TCCTCATCTG	TCAGTTGATT	AGCCTTGTTT	TTGTTATAAA	11040

ATTTCGCCTAA	ATAACTGCTT	TCTTTTTCCTA	AGAAGAGCCC	TTGGTATTTT	ATAGATTTGC	11100
TGGCTTCTAC	CACTGCTCCT	GCCAGACTTT	TTACCGCCAT	CAGAGATTGG	ACAGGTTTCAG	11160
CCATTTCCAA	GTACATGGCG	CCGAAAAAGT	TCTGCTCCCC	TTCTCTTTTT	AGGGCAGCAA	11220
GATAGGTTGG	TAACTGAGAA	TTGAGCCCAT	TAAAGAAATG	AGGAAACTGG	AACTGAGTCA	11280
GACTGGATTT	GTAGTCTACT	ACTCCTATCG	CTCCATTAGC	TTTCAAACGG	TCAATCCGGT	11340
CCACCTTGCC	TCGTACAAAG	ACACTGCGTC	CATTGTCTAA	TTGAATAAAG	GCTTGGTCTT	11400
TTCCACCAA	ATTTGCTTCT	TCTTTGATGG	TTTCGATGGC	TGGATTGTGT	CGGAGAATAT	11460
GTCCAGTTGT	CCGTGCAACA	TCAAGCAAAA	CTTCCTTGGT	AAACTGGGCT	TCCAAACTTT	11520
CTTGATAAAT	AGCTTCAAAT	TCGCGTTCTT	GACTGGTTTC	TTGAATAGCT	TGTTCTAGAC	11580
GTTGGTCAAA	GGAATCTTCA	TTAGGCAACT	GTAAGGCGCG	TTCAAAGATA	CGATGCAAGA	11640
AATTCCCGTG	ACTACGGGCA	TCAGGATGCA	AACGTAATTC	CTCCTGCAAG	CCTAAAACGT	11700
AGCGTAGGAA	ATAACTGTAT	TCATTGCGAT	AAAACCTCTGT	CAAACCCGAC	GTAGACAGGT	11760
AAAACCTCCTG	TTTGGCAGGA	TAGAGAGCTT	GCAAGGTGTC	CTTGGCTAAG	GTCTTGCTGC	11820
TTGGACTGGT	TGGGATAGCT	GGATTTTCCA	GACCTTGCTG	ATCTAGTTTT	TTACCTATGA	11880
CACGCGACAG	AACCTTGACA	AAAGTCAAAT	CTTGCTCAGT	ATCGCTCATC	TCACCCTGCT	11940
GGTGATAGGC	AACCAGACTA	GACAAAAGAC	TGTGATAGGA	CCCCATATCC	TCCTTAGACA	12000
GTCCTTTGTG	ATTCATCCTC	TTCTCTCTCC	GCCTAAATCC	AAAATGGATC	AACTCTTGAA	12060
GATAGGCAGA	TTCTTACTT	TCACTTTCGT	TAAAAAGGCT	TGGAGCCGAC	AAGAACAAC	12120
GCTTACGAGC	AGAATTGACC	AAGGAAAGCA	TAGTGTAGCG	ATTTTCTTG	AGATTTTCAC	12180
TGCTGGCAAT	CAGTAATTGA	ACGCCTTCTT	CGGTCGCTTG	GTTTAGGTTT	TGCCTTCTT	12240
CATCTGTCAG	AAGACTGGTG	TTTTGAGAAA	TTTTTGGTAA	ATTGTCCTGA	GTTAGTCCAA	12300
TAGCATAGAC	AAAGTCAGCA	GTCAATGGTG	CAATCAAATC	GTAACCTCTGC	ACCAGAACAG	12360
TGTCCACTGT	TGCTGGAATG	GTACGGTATT	GGGACAAACT	CATTCCAGAA	TGGAGCAAGG	12420
CTAGGAAGTC	TTCCAGACTA	ACCTGTGAAC	CAGCAAAAAC	AGTCGCAAAT	TGTTCTAAAA	12480
CATGGCAGAA	AGCCTTCCAA	ACTTCGGCTT	GTCTTTCCTG	TTCTACAGCT	TCCAAAGTGG	12540
TTGTCAAATC	TTGTAAC	TTGGTCACAG	CTCCTTCTTT	TAGAAAGACA	CTCCATTTTT	12600
GTAGGAGTTT	TTCAGCCTTT	TGTTTTCGGC	TGGCAAAGAG	GGTTTCAAGA	GGTGCTAAAA	12660
TTCTCAGGCG	GAGGACATTC	AAACGCTCAA	GATTAAATTT	TCCATGGTGG	GATTTGGTGA	12720
AGGTTTGCTG	AAAGGCTGGC	AAGCCATTGA	TACCAAGATA	GCGGATATAT	TGCTCAAAAG	12780

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CATCAATATC	AGACTGACTG	AGGTCAGTAT	ACAAATCAGT	TCTAAGAAGA	TTAATCAAAT	12840
CCTCCTGACG	AAAACGGTAA	CGTTTTTAAAG	CTAAAATAGA	CTCGACAAAC	TGAGTCAAGG	12900
GATGATGAGC	CATGGCTTCG	CTTCTACCAA	GATAAAAAGG	AATCTGATAC	TGGTCAAAAA	12960
TGGTTTTGAG	AGATAACTGG	TAAGAAGCTA	CATCCCCCAA	GAGAATACGA	AAATGCTTGT	13020
AGCTCAGGTC	TGAGTTCTCA	TGTAATTTCT	GACGAATACT	ACGGGCTACT	AGCTCCAACT	13080
CCTCCTTTTG	CGTCAAACAA	GACCAGATTT	GTAAATTTTC	ACGGTCTTTC	TCATCGACAT	13140
CCAAAGCGAG	TTCTGAAAAG	TCATAAGAAG	ACTCCAACAA	ACGAGAGGCC	TTGTCAAAAC	13200
TATCCATCTT	CTCATGAGTT	TGAGAACAGT	CCTGAGCAGG	CGTTTGGTAT	TTAGAAGCCA	13260
GATGATGGAG	AAATTTTACG	CTGGCTTGGT	AGAGATTGCC	CTCGCTAAAA	GGAAGGTAT	13320
AGGCTTTCTT	ACTAGCATAA	GCCCCGATAA	CAATCTCAAC	ACCTTTGCCG	TGAAGTAAGT	13380
CCACAACCCG	CTCTTCCTCA	GCAGAAAAAC	GAGTAAAGCC	GTCAATGACC	AAGGCGATTT	13440
GATTAAATC	ACTACTTACC	TTGTCAATTCT	CAATAGCCTC	AATCAAATGG	GACAACTGAC	13500
TTTCCTGGGC	TAAGTGACCT	TGATTAAGAT	AGGCTGTTAC	TTTCTCAAAA	ATCAAGAGTA	13560
AATCCGCCCT	CTTATCCTCA	TCTGTAAAT	TCTCCAAGTC	CAAAAACTC	ATCTGAGATT	13620
TGGTCATCTC	ATGGTAAAGC	TCAATTAACT	GCTGGATCAA	TTGAGGATCC	TGCTTAATAG	13680
CGCCATAAAC	ACGCAAGTCC	TTGGGATCGA	GTTCCGCAAG	GCATTTGTAA	AAGGCCAACC	13740
CAAGACCGAT	ATCATCAAGA	GTAGTTTTAG	CTGGTAAATC	ATTCAAGACC	AGATAGCGAG	13800
CCATTTGAGC	AAAGCGCGTG	ACGGTAATCG	AAAAAGAAGC	CTGCTGGGAC	AAGTATTCCA	13860
GCACGGCGCG	TTCCTTTTCA	AAAGAAAGAG	AGTTGGGGGC	AATGTAGAAG	ACCCGCTTGC	13920
CAGCTGCAAC	TAGCTCTTCT	GCCTCTCTTG	TTAGAATTTT	TGTCAAAGAA	GTCCGAATAT	13980
CAGTATAAAG	TAATTTTCATC	TCAGCCTCGT	TGGAATTTTT	CATCACCTTA	TATTATACCA	14040
TGATTAGCCT	CGTAAATCTG	TTAAAATATT	TAGGCCATCC	TTTCTTTTCT	TCATCATCTG	14100
CTAAATCTTA	AATACTTAGC	TTTACTTGTA	TTAGATAGAA	TAAGTCTGGC	TACTGAAAAT	14160
CACATAATAA	AAAAGCCTCG	GTAACAAGGC	TTTGAGTTTT	ATGATTGTTT	CTTAGGTACG	14220
GAATACACTT	CAATGTGTTG	TCCCAGTATC	TTAATGTCGA	CTGGTAGATT	GTCTGATTTA	14280
TCGCCATCAA	CATCGGACTC	TAATTGATA	TCAGAAGAAG	TTTAAATATT	ACGTGCCTTT	14340
ATATATTCAA	TATTCTTGAT	AGAATGATTG	AACTATAGTA	AATTGAAACT	ATAATAGTAC	14400
ACCGTGGATG	CTAAAATATT	TCTAGAAATT	AATTTGATTT	CCCTAATCAA	GCTATTCGTA	14460
TCTTATTTCA	ATCTACTATA	ATAAAATGAA	CCAAAAATAG	TACACAATGT	GGTATAATCT	14520
TCTTATGGCA	TATTCAATAG	ATTTTCGTAA	AAAAGTTCTC	TCTTATTGTG	AGCGAACAGG	14580

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TAGTATAACA GAAGCATCAC ACGTTTTTCCA AATCTCACGT AATACCATTT ATGGCTGGTT	14640
AAAGCTAAAA GAGAAAACAG GAGAGCTAAA CCACCAAGTA AAAGGAACAA AACCAAGAAA	14700
AGTTGATAGA GATAGACTTA AAAACTATCT TACTGACAAT CCAGATGCTT ATTTGACTGA	14760
AATAGCTTCT GACTTTGGCT GTCATCCAAC TACCATCCAC TATGCGCTCA AAGCTATGGG	14820
CTACACTCGA AAAAAAGAAC CACACCTACT ATGAACAAGA CCCAGAAAAA GTAGCCTTAT	14880
TTCTTAAGAA TTTTAATAGT TTAAAGCACC TAGCACCTGT TTAGATTGAC GAAACAGGAT	14940
TCGATACTTA TTTTATCGA GAATATGGTC GCTCATTAAG AGGTCAGTTA ATAAGAGGCA	15000
AAGTATCTGG AAGAAGATAT CAGAGGATTT CTTTGGTTGC AGGTCTAACA AATGGTGAAT	15060
TAATCGCTCC AATGACTTAC GAAGAGACGA TGACGAGCGA CTTTTTTGAA GCTTGGTTTC	15120
AGAAGTTTCT CTTACCAACA TTAACCACAC CATCGGTTAT TATAGTAAAA TGAAATAAGA	15180
ATAGGGGGGG GGGGGGAGGG GGGGGGAGGG AGA	15213

(2) INFORMATION FOR SEQ ID NO: 27:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6004 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 27:

TTATTACCTG AAACATTAAA TTTAATTGGA CATCCCGTTA TCAATTTTAT AATATCATCA	60
AGATTTTAT TATCTGATTC AGGAATTTTA TCTGATATAA CAACACCATT TTCAAGATAG	120
TTCATTAAAT TATTTGATTC ACTAACATTA GTGTTTTGAT CTCCATCAAG CCAAAAATAA	180
TGGTTATCGG AATCTAAATA CGATGAGTTT AAAATATTAT TACAAATTAT TTGATTTGCT	240
CCACCAGGAA TATATCTCAC TACTAAATTC TGTTTAAGAT TCTCACTACC TGAATGAGTG	300
ATAACAACT CTAGAATATA TTTAGCTAGT CTATCTTCAA CATAAATCAT CTCCTAGAA	360
TGATACACAT CACCTAATTC AAAAAATGCA TCCTGATAAT CAATATTTTC AATAACATCT	420
ACCTTTTCTC CGTTTTTCAC TAAAAGTTTC ACGGCTTCTC TAGGAAAATC TTTTATAAGT	480
TGTGTAGAAT GTGTAGTGAT AATAATTTGA TGTTTTTTAT TTAAACACTC TTGAAGTAAA	540
AACTCTTTAA ATTTATAGAT TGCACTCGGA TGAAGTGAGA TTTCAGGTTC ATCTATTAAT	600
ATTAATGAAT TTGATTGCGC ATTTACTATA TCATTTACTA ACAAATAAT TCTAGCCTCA	660
CCTGTTCTTG CAAAAGCCTC GGAATATTCT TTTCCAGATT TTTTCATCCA AATAGTTTTG	720

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GAAGCTTTTA	TATCATCACC	TTTTGAATAC	AACTTATGTG	TTAAAATTTG	AATGTCTGTA	780
TAAGATTCAT	CCATTATTTT	ACTAATAATT	TCACAAACTT	TATCATCAAC	TTTAACATTA	840
TCTATAACCA	TTTCCTTTTT	ATAACGCGTA	TAGCTACTTG	TATTATTCTT	TAAAATATCA	900
GCAACTGGCT	TAGATCGTAA	TCTTATAAAA	TCTTGTTTAC	TACGTTGAGT	AGAAATTTTT	960
TTAAAATTAT	AGTGATAGAA	AAATAAATCA	AAAGCAGAAA	CATATTCTTT	ACAATCACAA	1020
AAGACAACAT	TTTTTTCAAT	GCCATCCCAT	CTGTCTGTCT	AAGAACTTCC	AATATATTTA	1080
TTTTTGCGTA	ATCTTTCCAT	CTCATATTGT	TTTTGAGGAG	CATATGGTTC	CCAATAATCT	1140
AATCCTTTTT	TTGTTCCAGA	ACGGCCTTTA	AGAACTTCTA	CATTTCTAGA	AGCTTTAATG	1200
TTATAATATG	AATAGATTAA	ACATTGTTTC	CCATCCACTT	CATCTATTTG	ATCAACATTT	1260
GTACTAAACC	AATATTCAGA	CACACTTTTA	TTGGCTGGAG	AACCATATAA	AGCTTGTAAG	1320
ATTGAAGTTT	TATTTACTCC	ATATCTATTA	CAGACACCTC	AGGATTATTT	AACTTATAAG	1380
TTTTAACAGC	TACGGAATCA	ATTTCAACAG	CAACTTGAAC	ATCTATGCCT	GATTTTTTAA	1440
GGCCACTTGT	AGTGCCACCT	GCACCGTTAA	ATAAATCAAT	AGCAACAATT	TTCCCCATAG	1500
TATTCTCCTA	AAGTTTCTCC	TTTTTATTAT	AACATTATCA	AATGTAAAAC	CCAACCCGAT	1560
AGGGTTAGGT	TTTTAACATC	ATTTACCAA	CTTCTTCATC	TCATCAATAC	GTGCGACGGT	1620
CGCGTCATAT	TTAGCTTGGT	AGTCAGCTTG	TTTGTCGCAT	TCTTTTGGGA	CGACTTCTGG	1680
TTTGGCGTTG	GCTACGAAGC	GTTTCGTTAGA	GAGTTTCTTA	CCAACCATGT	CCAGTTCTTT	1740
TTGCCATTTA	GCAAGTTCCT	TGTCGAGACG	GGCCAGTTCT	TCTTCAACAT	TGAGGAGATC	1800
GGCCAGTGGC	AGGTAGATTT	CTGCTCCTGT	GATGACACTT	GACATAGCCA	GTTTCAGGTGC	1860
AGGGATGGTT	GATGCGATTT	CCAAGTGTTT	TGGATTTGTA	AAGCGTTTGA	TATAGTTGAC	1920
ATTGCTGTTA	AAGAAGGCTT	CCAAGTCGCT	ATCGCTTGTC	TTAACAAGGA	TGGTGATAGG	1980
CTTGCTTGGT	GCTACATTTA	CTTCCGCACG	CGCATTCCTG	ACAGCACGAA	TCAAGTCTTT	2040
GAGACTTTCC	ACACCAGTGT	GAGCCGCAAG	GTCTTCAAAG	GCTAGATTAA	CAGTTGGGTA	2100
TGCAGCTGTC	ACGATAGAAC	CTTCTGAGAT	TTGTCCAAAG	ATTTCCCTCT	TCACGAATGG	2160
CATGATTGGG	TGAAGGAGAC	GAAGGATCTT	GTCCAGCGTA	TAGAGGAGAA	CAGATCGAGT	2220
AATGACCTTA	TCGTCTTCAT	TGTCGCTGTA	TAGAACTTCC	TTGGTCAACT	CAACATACCA	2280
GTTGGCAAAT	TCTTCCCAGA	TGAAGTTGTA	AAGGATATGA	CCAGCCACAC	CAAACCTCGAA	2340
CTTATCAAAG	TTTTTCAGTAA	CTTTTGCAAT	GGTTTCGTTG	AGATTGTGGA	GAATCCAGCG	2400
GTCCGTCACA	TTACCAGCCT	CACCTGTTGC	AACTTTTGTG	ACATTGTCAT	GCGCCACATC	2460
CAGCGTCAAA	CCTTCATTGT	TCATGAGGAT	ATAGCGAGAA	ATGTTCCAAA	TTTTGTAAAT	2520

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AAAGTTCCAT	GAAGCATCCA	TTTTCTCGTA	AGAGAAACGA	ACGTCTTGAC	CTGGTGCGGA	2580
ACCGTTTGAA	AGGAACCAAC	GAAGGGCATC	AGCACCGTAT	TTCTCGATGA	CATCCATTGG	2640
GTCAATCCCG	TTACCGAGAG	ATTTAGACAT	CTTGCGTCCT	TGCTCGTCAC	GGATGAGACC	2700
GTGGATAAGC	ACGTTTTGGA	ATGGCTGACG	ACCAGTAAAT	TCCAAGGACT	GGAAGATCAT	2760
ACGAGACACC	CAGAAGAAGA	TGATGTCGTA	ACCTGTTACC	AAGGTTGAAG	TTGGGAAATA	2820
ACGTTTAAAG	TCTTCTGAGT	CGACTTCAGG	CCAGCCCATG	GTTGAAAATG	GCCAGAGGGC	2880
AGAACTGAAC	CAAGTATCCA	AGACGTCTTC	GTCCTGAGTC	CATCCGTCAC	CTTCTGGAGC	2940
TTCTTCGCCG	ACATACATTT	CACCATCAGC	ATTGTACCAG	GCAGGGATTT	GGTGACCCCA	3000
CCAAAGCTGA	CGAGAGATAA	CCCAGTCGTG	GACATTTTCC	ATCCATTGAA	GGAAGGTATC	3060
GTTGAAACGA	GGTGGGTAGA	ATTGACCTT	GTCCTCTGTG	TCTTGGTAG	CAATGGCGTT	3120
CTTAGCCAAT	TGGTCCATCT	TGACGAACCA	TTGAGTAGAC	AAGCGTGGCT	CAACTACGAC	3180
ACCTGTACGT	TCTGAGTGAC	CAACACTGTG	GACACGTTTT	TCGATTTTGA	CAAGGGCACC	3240
GATTTCTTCC	AACTTAGCAA	CGACTGCCTT	ACGAGCTTCA	AAACGATCCA	TGCCTGAAAA	3300
TTCAAAGGCA	AGCTCATTCA	TAGTTCCGTC	GTCGTTTCATG	ACGTTGACTT	GTGGCAAGTT	3360
ATGACGTTGG	CCAACCAAGA	AGTCATTTGG	ATCGTGGGCA	GGTGTGATTT	TCACGACACC	3420
AGTACCAAGC	TCAGGATCTG	CGTGCTCATC	TCCAACGATT	GGGATGAGTT	TATTAGCGAT	3480
TGGAAGGATG	ACGTTTTTAC	CAATCAAGTC	CTTGTAGCGC	GGGTCTTCTG	GATTAACCGC	3540
AACCGCAACG	TCCCCAAACA	TAGTCTCAGG	ACGAGTTGTA	GCAACTTCAA	GGGCGCGTGA	3600
ACCATCTTCC	AGCATGTAAT	TCATGTGGTA	GAAGGCACCT	TCTACATCCT	TGTGAATCAC	3660
CTCAATATCA	GAAAGGGCTG	TGCGAGCTGC	TGGGTCCCAG	TTGATGATAA	ACTCACCACG	3720
ATAGATCCAG	CCTTTCTTGT	AAAGGTTTAC	AAAGACCTTA	CGAACAGCTT	TTGACAAACC	3780
TTCATCAAGA	GTGAAACGCT	CACGAGAATA	GTCTACAGAA	AGCCCCATCT	TGCCCCATTG	3840
TTCTTGATG	GTAGTGGCAT	ATTCGTCTTT	CCATTCCCAG	ACCTTCGTCA	AGAAAGACTC	3900
ACGACCTAGG	TCATAACGCG	TAATACCCTC	ACCACGTAAG	CGCTCCTCAA	CCTTAGCCTG	3960
AGTCGCAATA	CCAGCGTGGT	CCATACCTGG	AAGCCAAAGG	GTATCAAAGC	CTTGCGATGCG	4020
TTTTTGACGG	ATGATGATAT	CCTGCAAAGT	CGTATCCCAA	GCGTGACCAA	GGTGAAGTTT	4080
CCCAGTTACG	TTTGGTGGTG	GAATCACGAT	TGAATAAGGC	TTAGCCTTTT	GATCGCCTGA	4140
AGGCTTGAAA	ACATCCGCAT	CAAGCCATTT	TTGGTAACGA	CCAGCCTCAA	CCTCGGCTGG	4200
ATTGTATTTA	GGTGAAAGTT	CTTTAGACAT	GTGTGTGTCC	TTTCTCTATT	TTGTTTATTT	4260

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TATTTTGAAT	TTGCTTAGCA	GCTTCTTCTG	CAGACAAATT	CGTATTATTT	ATTTTAAAGT	4320
AGTGGTGCAA	CTCATTCGGT	TGATGTTGGG	AATTTAATTG	AAGTGTTTCA	GCGGTCTCTA	4380
AAATTTCTCT	TTCAGATACC	TCAATATGTC	GTTTTAAGGG	TTTGTGCTTT	AATCGATTCT	4440
CCGTTCGATT	TCGACGTATG	CACTCTTCAA	GACTTGTTTC	CAATTCAACA	AACAGAATCT	4500
CTTGATGAAA	GTTATCCAAT	AAATCCTGAA	TTTGCTTTAA	ATACATCAGC	TGGTACTGAT	4560
TTGAAAAATC	AATTACGTCT	GTTAAAATTA	CTGATCGCTG	ATTTCTTGCA	CTTGCTCCAA	4620
GGAAAGAAAA	GGTAATTCCA	CGAACAAATT	CCCACATCTC	CTCGGTATAA	TCCTGATAGA	4680
TCTCTAGTGC	AAAATCAATG	GCTTGATGGT	TATAAAATAG	GGTAGCATCC	GTCAGTCGAG	4740
ATAATTCTTG	ACCAATGGTC	ATTTTTCCTG	ATGCTGGAGC	ACCAATGATG	AAAAGATGCA	4800
TCAAATCACC	TCCCACCTAC	TCCTCAGCAA	GCCATATCTC	AAATCATCAC	AGCAGTTGCC	4860
TTGAGCATCT	TTGCGGTCTC	TTATGCGAGC	TCGAGGGTA	AAGCCAAGCT	TTTCCGAGAC	4920
TCGTTGACTT	TGAAGGTTAT	ATCCAAAGCA	AGTTAGTTCA	ATCTTG TGAA	GACCAAGTTC	4980
TTTAAAAGCT	AGATCAATCA	AGGAACACGC	TGCTTCTGGA	ACATAACCTC	GACCCCAATA	5040
GTCTGGGTGC	AAGGTATAGC	CAAGCTCTAG	CACATCATCC	GCATGAAGAT	GGTTGAAGTC	5100
AACAGAACCA	ATGACTTTAT	CGGTTCCCTT	GACGACAATC	CCATAGCCAG	CTGGGAGATT	5160
TTCTTTTGA	GTACGCTCCG	GAAGAATGTG	CTCCAGATAA	TAAATCTCAT	CTTCCAAGAT	5220
CTTGACTGGA	GGAAAACCTG	CTGGATAGGC	GACCTCTGGC	AAACTAGCGT	AGGTATGGAT	5280
ATCCTCAGCA	TCCACCACTG	TGCGGACTCG	TAAAACGAGA	CGTTCTGTTT	CGATTTTATC	5340
TGGCAGCTCA	GTTCTTGCCA	TCCTTCTTCC	TCGCTTTTTT	GATGAAACTG	CCCTTCATAT	5400
CTACACGCTT	GTCCAGATAG	CGATAAACGC	GCTGATATCC	ATCTCCCATG	AAATAGGTTG	5460
GGGCAAACAG	TTGATTTTTA	AAATGTCCCT	TTTCATCCAG	GAGTTCTGGG	GCAACAAGTC	5520
GCTCAAGAAT	CTTGGCAAAG	ATGTGGCAAA	TACCGTCTTC	CTCAACAATC	CTATCTACCC	5580
GACAATCTAA	AACAAGTGGA	CAGGCGTCTA	AAATAGGAGT	CTGAGTTCGT	TCAGAAATTT	5640
CATAATGCAC	TCCCAAACGT	TCCAATTTCT	CCTGATGACT	GATAAAACCA	GCCTGCTCCA	5700
TCGCAAGCAT	AGAAGTTTCA	TCAGAAATAT	TCACAGTAAA	TTTTTGATAC	TGTTTGATCT	5760
GCTCTGCGGC	ATTCTCTCTC	GCAACGACTC	CAATCACAAC	CCAATCTCCT	AGACTATAAG	5820
AGGAACTACA	GGTCGTGATG	TTATAGCCAA	AATTCTAATC	TTGATATCCT	AAAATAAAAA	5880
CAGGAAAACC	ATAATATAGT	TTACTTGTGT	TAAAAGATTG	CTTCATAACA	ACCCCTTTTG	5940
ACTAAGACGT	AAAAGAAAAG	CCCTGCCATC	TACATGACAG	GGACGAATGT	GTTTATCCGC	6000
GGGG						6004

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(2) INFORMATION FOR SEQ ID NO: 28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5857 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 28:

TGTAGAATTC ACGACAATGC TTCGTTGATT TCTGGGTTGA TTTCGTCGCG TTCTGGCAAG	60
CGAGTCAATG AACCAAAAAT AGTACACAAT GTGGTATAAT CCTTTTATGG CATATTCAAT	120
AGATTTTCGT AAAAAAGTTC TCTCTTATTG TGAGCGAACA GGTAGTATAA CAGAAGCATC	180
ACACGTTTTTC CAAATCTCAC GTAATACCAT TTATGGCTGG TTAAAGCTAA AAGAGAAAAC	240
AGGAGAGCTA AACCACCAAG TAAAAGGAAC AAAACCAAGA AAAGTTGATA GAGATAGACT	300
TAAAAACTAT CTTACTGACA ATCCAGATGC TTATTTGACT GAAATAGCTT CTGACTTTGG	360
CTGTCATCCA ACTACCATCC ACTATGCGCT CAAAGCTATG GGCTACACTC GAAAAAAGAA	420
CCACACCTAC TATGAACAAG ACCCAGAAAA AGTAGCCTTA TTTCTTAAGA ATTTTAATAG	480
TTTAAAGCAC CTAACACCTG TTTAGATTGA CGAAACAGGA TTCGATACTT ATTTTATCG	540
AGAATATGGT CGCTCATTA AAGGTCAGTT AATAAGAGGC AAAGTATCTG GAAGAAGATA	600
TCAGAGGATT TCTTTGGTTG CAGGCTAAC AAATGGTGAG TTAATCGCTC CAATGACTTA	660
CGAAGAGACG ATGACGAGCG ACTTTTTTTGA AGCTTGGTTT CAGAAGTTTC TCTTACCAAC	720
ATTAACCACA CCATCGGTTA TTATTATGGA TAATGCAAGA TTCCATAGAA TGGGGAAGCT	780
AGAACTCTTG TGTGAAGAGT TTGGGTATAA ACTTTTACCT CTTCCCTCCCT ACTCACCTGA	840
GTACAATCCT ATTGAGAAAA CATGGGCTCA TATCAAAAAG CACCTCAAAA AGGTATTACC	900
AAGTTGCAAT ACCTTTTATG AGGCTTTTTT GTCTTGTTCT TGTTTCAATT GACTATATAA	960
ATTGTCTAAG CGAAACAACC GATAAGAATT GGCACAAAAG CGACCGTATT TTTGTTACCA	1020
ATACAGGAAA AACAGTTCAT AGTTCTATCT TGAGCAAGTC TCTCCAGCGA GCAAACGAAC	1080
GCCTTAAAAA ACCAATTCCC AAACATCTGT CCCCTCACAT CTTCAGACAC ACCACTATTA	1140
GCATCTTATC AGAAAATAAA ATTCCTTTAA AAACAATCAC GGACAGGGTT GGTCATCCCG	1200
ACTCTGAAGT CACTACTTCC ATCTACACCC ACGTCACAAA GAACATGAAA GATGAAGCAA	1260
TCAATGTACT GGATAAAGTT ATGAAAAAGA TTTTTTAAAA AGTTTGTGCC CTTTTTTGCC	1320
CTCTAAATAC AAAAATAGCC CTTCCGATAA AATCCGAGGG GCTAGAAACG TTGTTAAATC	1380

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AACGGCCGAA	CTTTTGAATT	TCATGGTTTCG	GGATAAAATA	GTTCACTGAA	CTATTTTATT	1440
TTTTAAGGTT	ATCATAATAT	CAAATAGTTC	AATTAAATAC	GCTAAATTAC	TAATATACTT	1500
TTTACCTTTT	TCATTCTAAA	ATGTAAAGTA	CAAACAATTA	CAATATACTA	GAGGGGGAGT	1560
AAAAAAGGTA	TTAAATCGAT	GAGTTCAGCA	GGCAAGAAAA	TAGCACCTTT	ACGGGTGCTA	1620
TTTTTTAATT	AACGCCACGT	TAACTTTTGA	TTGATGAATT	TTATTGTTTG	GCACTTCTTT	1680
CATTTACCGG	TAAACATCGA	TGAAATTCTT	TCCAACATTA	TTTTTGGAGT	TAACTGCATT	1740
TATTTTGTGA	TTAATAACTT	TTTtagTATC	GAAAGAATGG	TTTAAGAAAT	CCATAACTAA	1800
CTCTCCTTTC	TCATCCTGTA	ATCAAGATTT	TTATCAATGT	CAAAATAGTA	TTTCTATCA	1860
ATCCAAATTG	GTCCTTCTCC	TTTAGAAATA	GCAAGTACAT	CTACCGGACC	TCCTACTGTT	1920
TCAAGAGTGT	TGACAATTTT	TCTCTTAAAT	GAAGTTAATT	CAATAAATGT	TTTAGCTGTA	1980
CTCGCCATTT	CATTAAGTGG	TTGCATTCCA	ATAAGGTCTA	TTATAGGATT	TATATAATAT	2040
TTTTTGCTGTA	TAGATGATAT	ATTTTCAAAT	ATATTCTCAA	TTTCATCACC	CAATCCATTT	2100
TTCTCCATAA	CTGATGATAC	TTGCTCTGCG	ATATATACAT	TTAAGTTAGG	ATCTATACCA	2160
TTCATAATCG	TCTCAACCAT	CTCTGACTGT	GCAAAAGGGA	TTATATGACA	AGTTTTATGA	2220
TGATTTATCA	CACTTTCATT	AATAACTTTC	CAAATTAATC	GTTTAGAAAA	AATTCCATAT	2280
AATTCAATTT	GTCTTATAGA	TGGAAATATC	TCGTCTGTAC	CATAACCTGC	TATAACTAAT	2340
CCAGTTATGT	TTGTTGAGTC	ATATCCAATG	AAAATCGCTT	TATATAAAGA	TTTAGCAATA	2400
ACTTCAACCT	CATCATCAGT	ATGAGGAAAG	GATTTAAAAA	CATCGTCTAC	AATGCTTTTT	2460
ATTAACCTA	ACTCAGCTTC	AAAAAATTCA	AAATTACTTT	CAGCTTCTAC	TTTTGAAATT	2520
TCTAAACTAA	AATTAGTTAT	AGCATTTAAT	AAAATTTTAT	TAAAATCATC	TAGAGTGATG	2580
GTTTCACCAT	TAGAACTCT	TAAATCAGCT	GTTTCTTGCG	CTTCATAGGC	AATGCTGTCC	2640
AAAATACTTC	TTGTACTTCT	GACAATATAA	TTTCTTAATA	AATCCTCAAC	TTGTAGATGT	2700
TTAAAGGAAA	TTAAAAATTC	TATTAGCTTT	TCAACGTATT	GGGCAGTATT	ATCTAATAAA	2760
TCTGTGCCAA	TAGCCTGCTT	AAACTCATTT	AAAATTACCT	CCCACGGAAT	TTCCATAAAC	2820
GAAGCGTTCC	CATATATCAT	GATCCCCACG	GAATGTTCTT	TTGATAAAGT	GAATAATTTT	2880
CGGGCGCTAT	TAAAAACTTT	TGAATTTTTC	CCGTCTGATA	AGGTTACAGC	GCTATCAGAA	2940
GCCAATACAA	CACCATTTTT	ATTTAATATT	CCAATTCTTG	CTGTCAAAAT	ATCACCTAAA	3000
CTTTCTAAAC	CTGCTCATGC	TCTAATGGTA	CAACAGCTAA	GGTCTTACCA	AGACTTGCCA	3060
ACACTTTTAA	TACTGTATCA	AGTTGTGGGC	TTGTCTTTCC	TGTTTCCATT	CTAGCGATAA	3120
CTGGCTGACT	AACACCGCTC	ATCTCCTCTA	GTTTCTTCTG	ACTAATACCC	TTTTCATTTT	3180

TAGCCTCGAT	AAGCTCACTC	ATGATAGCCA	CGCGCATATC	ACTTTCCAAA	ATTTCCCTCTT	3240
TGCTGAATAA	TTCAGCTCTT	ACATCTTTCC	AGTTACTACC	AATAGCATTA	TTTTTCATTG	3300
TCTAAACCTC	TTTCTTTTAA	ATCTGCAAGT	TCACGTTTAG	CTTGCTCAAT	CTCTCTTTTG	3360
GGTGTTTTCT	GTGTCCTTTT	CATAAAATGA	TGCAGTAAAA	CAAAACTACC	ATCCATCCAA	3420
GCAACAAATA	AAATTCTATC	TCTAAGTGGT	CTCAGCTCCC	AAATTTTCAGC	ATCTAAATGC	3480
TTAATATATG	GTTCGCCTGC	GCGTGTTCCT	TGTTGGCTTA	ACAACCTCAAT	ATAATCATTA	3540
ATTTTATTAA	GCTTAATTCT	GCTATCTTTC	CCTTTTTTAC	TGGTAAGCTC	TCGCATATAA	3600
TCAAAAACAG	GCTCATTGCC	GTTTTTATCC	TTGTAAAAAT	AGATATTATG	CACTATTAAC	3660
ACCTCTTCCT	AATAACAATT	ATAACCTAAA	AGTTATTGTT	TGTAAATACT	TTTAAGTTAT	3720
TAAAATAAAA	AGCACCTAGT	TTCCTAGATG	CTAGCACAAT	GACACGGATT	CGCACCGTGG	3780
CTACCTCTAT	CAAGGTGTAC	TCCTTCTATA	CTATCCCTTG	TGCTTTAGAA	TATTATACCA	3840
CACAATCAAC	TAGATACCTA	CCATCTCATG	ATATACCCCC	ATTTTGGGCA	AGGGTACAAC	3900
GCTAAAATAC	AAATCAGAAT	AGATATTAAA	CCACTTATTT	AACCTATCAT	AAGCTGGTGA	3960
TTGACTGATA	AATAATATCC	GCTGACAAGC	TCCGATAACA	TTCATGTGAT	TGTACACATA	4020
AACCTCTTTT	ACAGCCTCTA	AAATGTCAGC	CTCACTTGTT	TGTACCCTAA	TATCTGTTAT	4080
CTGCTTGATA	GTTGCGTATT	TTTGATAAGC	TAGCATATCT	TGATTTTTAG	CAGCATCAAA	4140
CATTTTACGC	TCAAGGACAC	TATACTTAGG	TTGTTCTTTA	TCTCGCATGA	AATACCACTT	4200
GAGCCATAAA	ATCTTTTCTC	GGTGTATTAC	AGAAATACGC	TCAATTTTCT	TCTTTGTCAT	4260
TGCTACCTCC	TAAATCATCA	ATTTAACAAT	TCTAACCCTT	CACTTTTAGA	AATAGTTGCA	4320
TAGATCTTGT	TCGATGTATG	ATACAAAGGT	TCTAAATCTT	TTTCCACCCT	AATATAGTTC	4380
ATCTTATCCT	CATGAGTAGG	AAAGTATAGT	ATTTCCGTTT	CATCCTCGTT	TAGGATACGA	4440
TTGCACCAAT	CATCAATAAT	AACTGGCACT	TCCCACTCAC	GCCATTTTTT	AAGGTTTTCT	4500
AAAAGTTCAT	TATCACTAAA	TAGCTCGCCA	TCTATTTGGA	AAAATTCCCC	TAAGTCATTG	4560
TTTCCTTCAA	CAATAATAAA	CTCTGGCATA	TTTCTATTAC	TTAATAACTC	CTTGAGTTCT	4620
TGTAACCTCT	TGATTTCCCT	TAGATACTTC	CTCAATTTCC	AACCTCAATT	CTTCAATCTG	4680
CCTTACTACT	CCAAAAATTT	CATGGGTCTT	ATAAGATTGT	TCAAGTATAG	CCTTTGCTGC	4740
TTGAGTTCTT	ATAAACGGGT	TGACCTTACT	GTCCATCATA	ATATCATTGA	GTACAGAAAC	4800
AGCGTTAGAT	GATGCTAAAT	AAAGCATTTG	AGTTGTTTTA	TCCATCATCT	CATCTTGCTT	4860
TATCCTCAAT	GTCTTTTTAA	CCGCTGCAAC	TTTGTAGATAC	TTATGACCTG	TTGCGCGTGA	4920

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TACCCCTGCT	TTTTGACATG	CTTTGTCTAT	CGTTGGCTCG	GTAAGCATGG	CATCTATGAA	4980
TTTAATTTGC	TTGGACGTAA	GGTTATCATT	TTCATTTCCCT	GCCATCTATT	ACCTCCTCAT	5040
TATCAAAAATA	AAGGGTTGCC	CCTTTATTTT	CCTATGCTAG	ATAATTCTGC	AATTCTGCAT	5100
CCATTGCCTC	TGAATTGCCC	TCAACAATCA	TTTCATGCTG	TACTAAATCA	ATCTTATCTC	5160
CGTTAATAAG	TAAACCACCG	TGGAAATAAT	CAATTTTTCT	ATCAAGGAAA	TGTACTAGCT	5220
TTTCAAGGCG	TTGCTGTTGG	CTGAATTGCT	CCATGTCAAT	TTGATATAA	GCAAGGGTAG	5280
TATCATTATC	CATAATATCT	TCTAATTTTC	TAAGAGCTAG	AGGTTTATTT	TTATATTTTT	5340
CTAGGTATTC	TCTCATTTCT	GCCACTGTTA	ATTTGATACT	AGATAATAAA	CTTAGTTCAG	5400
CTGCATCATC	TGCTGTAATA	GGCTCTTCTT	TTGATTCATG	GTTTGCTAGT	TCAGCATTTT	5460
TCTCTTTTTT	TAGTTGCTGA	TACAATAGCT	GAGCAGTATT	TTGGGAATAG	TTTTCGCCCT	5520
CTTTTTTATA	TTTTAAAAGT	TCTTGCTCTG	CATACACTTT	CCCGATAATC	ACTTCCTTAT	5580
AAACTAATTG	CCCATCTTGA	GCTTTTAGCT	TAATACTCCC	ATGCTCTGGA	ATTTCAATAT	5640
ACTTAATTAT	ACCATTTTTT	GAGTATAAAA	CAAAGCCTTT	CTCCATCAT	TTTAATAATT	5700
TATCATCCTT	GTTTTCAGTC	ATGCTTTTCT	CCTTTATTTT	ATTTTATTAT	AATCTGAATA	5760
CCCCTAGTCT	ATTTATTTCA	CTAGGTTTTT	AGGGTTCGTA	TGCTAAAATA	CTACCCTTTT	5820
TGTGTACCTT	ATGGCTGACT	TTTCAAATTG	GTTAGTT			5857

(2) INFORMATION FOR SEQ ID NO: 29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 29:

AAAATGATAG	CAGGAGAGTT	TTCCCGTCCA	TCAGACCCAG	AACTGAGAGC	CTTAGCTCAG	60
GCTTCTCGCC	AAAAACAGGC	CGCCTTTAAC	AAGGAAGAGA	ACCCCTTGAA	GGGAGCCGAA	120
ATCATCAAGA	CTTGGTTTGC	CTCAACCGGG	AAAAATCTTT	ACATCAACAC	TCGCTTGATG	180
GTGGACTACG	GTGTCAACAT	CCATCTAGGG	GAAAATTTTT	ATTCTAATTG	GAACCTGACC	240
ATGCTGGATA	TCTGTCCCAT	TCGTATCGGG	GACAATGCTA	TGATTGGTCC	TAATTGTCAG	300
TTTTTGACAC	CCCTCCATCC	ACTAGATCCA	CAGGAACGCA	ATTCAGGTAT	CGAGTACGGA	360
AAGCCTATCA	CAATCGGAGA	TAATTTCTGG	ACTGGTGGTG	GCGTCATTGT	CCTTCCTGGA	420
GTGACACTGG	GAAATAATGT	CGTTGCAGGA	GCAGGGGCAG	TAATTACCAA	ATCTTTTGGC	480

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GACAACGTTG TCCTAGCTGG CAATCCTGCG CGCGTGATTA AGGAAATACC TGTAAATAG	540
AAGTAAAAAG GAACAGCTGG GGTGTTTCT TTTTGTAGG TTTCATCATT TTTTACCCAG	600
TTCACATTTA CCTACTCTAT CTCTTAGCAA GTCTGTTTCA TTAAGCAAGT TCAAAGCATC	660
TCGTAAGTGG GATGTTTTTC TCCTCAGTTC ATCAGCTTCC TCCTTGACAC TCGGTCAGAT	720
TTTGATACAA TAGTACAAAA TTAGAGGAGG CAGGCTATGA TTCAGAAACA TGCGATTCCT	780
ATTTTAGAGT TTGATGACAA TCCTCAGGCG GTTATCATGC CCAATCACGA GGGGCTGGAC	840
TTGCAGTTGC CAAAGAAGTG TGTTTATGCA TTTTLAGGTG AGGAGATTGA CCGCTATGCG	900
AGGGAAGTAG GGGCGAACTG TGTTGGCGAA TTTGTTTCTG CCACCAAGAC CTATCCAGTT	960
TATGTCGTGA ACTACAAGGA CGAGGAGGTC TGTCTGGCTC AGGCTCCTGT TGGCTCCGCT	1020
CCAGCAGCCC AGTTTATGGA TTGGTTGATT GGCTATGGTG TGGAGCAGAT TATCTCTACT	1080
GGGACCTGTG GTGTCCTAGC TGATATAGAG GAAAATGCCT TTCTAGTCCC GTTTCGCGCT	1140
CTGCGAGATG AAGGAGCCAG TTACCACTAT GTGGCACCTT GTCGTTATAT GGAAATGCAG	1200
CCAGAGGCTA TTGCTGCTAT TGAGGAAGTT TTGGAAGACA GAGGGATTCC TTATGAAGAA	1260
GTCATGACCT GGACGACAGA CGGTTTTTAC CGAGAAACGG CTGAAAAGGT GGCTTATCGT	1320
AAGGAAGAAG GCTGTGCTGT TGTGGAGATG GAGTGTTCTG CTCTTGCGGC AGTAGCTCAA	1380
TTGCGTGGGG TTCTCTGGGG TGAATTGTTG TTCACAGCAG ATTCTCTAGC GGAATTGGAC	1440
CAGTACGACA GTCGTGACTG GGGCTCGGAA GCTTTTAATA AGGCGCTAGA ACTGAGTTTA	1500
GCAAGTGTTT ACCACCTTTA GTTGTAAGTG CAAAGGATTT GTTTTATCAT AAAATGTCTA	1560
GCTCATACTT TTCAAAAATA TGTTTAAACG AGGTCACCTT CCTCTTGCTC TAGGCATGTT	1620
GAGGTTGGGA AAAATCTTTA AAATCAGAAA AACGTATCAT ATCAGGTGAT GAAAACTTTG	1680
ACACTATGCG TTTTATGTCG ATAAGATTTA GAGTGAGATG AAATGATACT CTTCGAAAAT	1740
CTCTTCAAAC CAGGTCAGCT TCACCTTGCC GTAGGTATAT GTTACTGACT TCGTCAGTCT	1800
TATCCGGCAA CCTCAAAACG GTGTTTTGAG CTGACTTTCGT CAGTTCTATT TGCAACCTCA	1860
AAACAGTGTT TTGAGCAACC TGTGACTAGC TTTCTAATCG ATGCCTTGGT TTTCATTGCC	1920
TATAATCAAA AAGAGAAATT TTCTCCTGAA AAGCATATAG AGTAGCTGGC GTTAAAAGCT	1980
CCTGTCTTGC TTTTGTGACC TATAGTCACA TCTATCAAGT ATTGTTCTTG CCTAAGCTAT	2040
CAATAAAAAG GTGGCATTTT TTAGGCTTGG TGTTAGTAGA TTTTGCCTTA TCCTATCTAA	2100
GTCATTTTCA ACTTTTTATG GTACAATGGA AACATGTTAT TCAAATTATC TAAGGAAAAA	2160
ATAGAGCTAG GCTTATCTCG TTTATCGCCA GCCCGTCGTA TTTTTTTGAG TTTTGCCTTG	2220

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GTCATTTTAC	TAGGCTCTCT	TCTTTTGAGC	TTGCCCTTTG	TCCAAGTTGA	AAGCTCACGA	2280
GCGACTTATT	TTGATCATCT	TTTCACTGCT	GTCTCTGCAG	TCTGTGTGAC	GGGTCTCTCA	2340
ACCCTTCCAG	TAGCTCACAC	CTATAATATC	TGGGGTCAAA	TAATCTGTTT	GCTCTTGATT	2400
CAGATCGGTG	GTCTAGGGCT	CATGACCTTT	ATTGGGGTTT	TCTATATCCA	GAGCAAGCAA	2460
AAGCTTAGTC	TTCGTAGCCG	TGCAACTATT	CAGGATAGTT	TTAGTTATGG	AGAAACTCGA	2520
TCTTTGAGAA	AGTTTGTCTA	TTCTATTTTT	CTCACGACCT	TTTTGGTTGA	GAGCTTGGA	2580
GCTATTTTGC	TTAGTTTTCG	CCTTATTCCT	CAACTTGGCT	GGGGACGTGG	TCTTTTTAGT	2640
TCCATTTTTC	TAGCGATCTC	AGCCTTCTGT	AATGCCGGTT	TTGATAATTT	AGGGAGCACC	2700
AGTTTATTTG	CTTTTCAGAC	CGATTTACTG	GTCAATCTGG	TGATTGCAGG	CTTGATTATT	2760
ACAGGCGGCC	TTGGTTTTAT	GGTCTGGTTT	GATTTGGCTG	GTCAATCTGG	AAGAAAGAAA	2820
AAAGGACGTC	TGCACTTTCA	TACGAAGCTT	GTACTATTAT	TGACTATAGG	TTTGTGTGTA	2880
TTTGGAACAG	CAACTACTCT	CTTTCTTGAG	TGGAACAATG	CTGGAACGAT	TGGCAATCTC	2940
CCTGTTGCCG	ATAAGGTTTT	AGTTAGCTTT	TTTCAAACAG	TGACGATGCG	AACAGCTGGC	3000
TTTTCTACGA	TAGATTATAC	TCAGGCTCAT	CCTGTGACTC	TTTTGATTTA	TATCTTACAG	3060
ATGTTTCTAG	GTGGGGCACC	TGGAGGAACA	GCTGGGGGAC	TCAAGATTAC	GACATTTTTT	3120
GTCTCTTTGG	TCTTTGCACG	AAGTGAGCTT	CTAGGCTTGC	CTCATGCCAA	TGTTGCGAGA	3180
CGAACGATCG	CGCCGCGAAC	GGTTCAAAAA	TCCTTTAGTG	TCTTTATTAT	CTTTTTGATG	3240
AGCTTCTTGA	TAGGATTGAT	TCTGCTAGGG	ATAACAGCCA	AAGGCAATCC	TCCCTTTATC	3300
CACCTCGTAT	TTGAAACCAT	TTCAGCTCTT	AGTACAGTTG	GTGTAACGGC	AAATCTGACT	3360
CCTGACCTTG	GGAAATTGGC	TCTCAGTGTT	ATCATGCCAC	TTATGTTTAT	GGGACGAATT	3420
GGTCCCTTGA	CCTTGTTTGT	TAGCTTGGCA	GATTACCATC	CAGAAAAGAA	AGATATGATT	3480
CACTATATGA	AAGCAGATAT	TAGTATTGGT	TAAGAAAGGA	AAGAGCATGT	CAGATCGTAC	3540
GATTGGAATT	TTGGGCTTGG	GAATTTTTTG	GAGCAGTGTC	CTAGCTGCCC	TAGCCAAGCA	3600
GGATATGAAT	ATTATCGCTA	TTGATGACCA	CGCAGAGCGC	ATCAATCAGT	TTGAGCCAGT	3660
TTTGGCGCGT	GGAGTGATTG	GTGACATCAC	AGATGAAGAA	TTATTGAGAT	CAGCAGGGAT	3720
TGATACCTGC	GATACCGTTG	TAGTCGCGAC	AGGTGAAAAT	CTGGAGTCGA	GTGTGCTTGC	3780
GGTTATGCAC	TGTAAGAGTT	TGGGGGTACC	GACTGTTATT	GCTAAGGTCA	AAAGTCAGAC	3840
CGCTAAGAAA	GTGCTAGAAA	AGATTGGAGC	TGACTCGGTT	ATCTCGCCAG	AGTATGAAAT	3900
GGGGCAGTCT	CTAGCACAGA	CCATTCTTTT	CCATAATAGT	GTTGATGTCT	TTCAAGTTGA	3960
TAAAAATGTG	TCTATCGTGG	AGATGAAAAT	TCCTCAGTCT	TGGGCAGGTC	AAAGTCTGAG	4020

TAAATTAGAC	CTCCGTGGCA	AATACAATCT	GAATATTTTG	GGTTTCCGAG	AGCAGGAAAA	4080
TTCCCCATTG	GATGTTGAAT	TTGGACCAGA	TGACCTCTTG	AAAGCAGATA	CCTATATTTT	4140
GGCAGTCATC	AACAACCAGT	ATTTGGATAC	CCTAGTAGCA	TTGAATTCGT	AAAGAGGGAT	4200
GACCCCTCTT	TTTTGATGCC	TAAGATGGCA	AATAGAGACA	GAAGCCCTT	GTCTTCTAGT	4260
AAAAGTTCTT	CAAAGGCTGG	ACTTTATGGT	AAAATAGAAA	GAAGTGACAA	GAGAGAGTAA	4320
TACTCAATGA	AAATCAAAGA	TCAAAC TAGG	AAACTAGCTA	CGGGCTGCTC	AAAACACTGT	4380
TTTGAGGTTG	CAGATAGAAC	TGACGAAGTC	AGTAACATCT	ATACGGCAAG	GCGACGTTGA	4440
CGCGGTTTGA	AGAGATTTTC	GAAGAGTATA	AGAAAAATC	AGTCCCCTAA	AGGAGTAGAT	4500
TATGAAGTTA	TTGTCTATCG	CAATTTCTAG	CTATAATGCA	GCAGCCTATC	TTCATTACTG	4560
TGTGGAGTCG	CTAGTGATTG	GTGGTGAGCA	AGTTGGGATT	TTGATTATCA	ATGACGGGTC	4620
TCAGGATCAG	ACTCAGGAAA	TCGCTGAGTG	TTTAGCTAGC	AAGTATCCTA	ATATCGTTAG	4680
AGCCATCTAT	CAGGAAAATA	AATGCCATGG	CGGTGCGGTC	AATCGTGGCT	TGGTAGAGGC	4740
TTCTGGGCGC	TATTTTAAAG	TAGTTGACAG	TGATGACTGG	GTGGATCCTC	GTGCCTACTT	4800
GAAAATTCTT	GAAACCTTGC	AGGAACTTGA	GAGCAAAGGT	CAAGAGGTGG	ATGTCTTTGT	4860
GACCAATTTT	GTCTATGAAA	AGGAAGGGCA	GTCTCGTAAG	AAGAGTATGA	GTTACGATTC	4920
AGTCTTGCCT	GTTCGGCAGA	TTTTTTGGCTG	GGACCAGGTC	GGAAATTTCT	CCAAAGGCCA	4980
GTATACCATG	ATGCACTCGC	TGATTTATCG	GACAGATTTG	TTGCGTGCTA	GCCAGTTCTA	5040
ACTGCCTGAA	CATACTTTTT	ATGTCGATAA	TCTCTTTGTC	TTTACGCCCC	TTCAGCAGGT	5100
CAAGACCATG	TACTATCTGC	CTGTCGATTT	CTATCGTTAT	TTGATTGGGC	GTGAGGACCA	5160
GTCTGTCAAT	GAGCAAGTGA	TGATTAAGTG	CATTGACCAG	CAACTCAAGG	TCAATCGACT	5220
CTTGATAGAC	CAACTTGATT	TGTCCCAAGT	GAGTCATCCC	AAAATGCGAG	AATATCTGCT	5280
GAATCATATT	GAATCACGA	CGGTGATTTT	CAGTACCCTG	CTCAACCGAT	CTGGAACAGC	5340
GGAGCATCTG	GCAAAAAAAC	GCCAATTGTG	GACCTATATT	CAGCAGAAAA	ATCCAGAAGT	5400
CTTTCAGGCT	ATTCGTAAGA	CCATGTTGAG	CCGTTTGACC	AAACATTCTG	TCTTGCCAGA	5460
TCGCAAACTG	TCCAATGTCG	TCTATCAAAT	CACCAAATCT	GTTTATGGAT	TTAATTAATA	5520
TAAGTGTTTT	ATAAGAGGGA	TTTAAGAAAA	ATTTTAACTT	TTTCTTAGTC	CTTTTAAATT	5580
TCAGGAGATT	ATACTAGAGT	CATCAAATAA	AGAAAGACTC	TAAGGAGAAT	CCTATGAAAT	5640
TCAATCCAAA	TCAAAGATAT	ACTCGTTGGT	CTATTCGCCG	TCTCAGTGTC	GGTGTTGCCT	5700
CAGTTGTTGT	GGCTAGTGGC	TTCTTTGTCC	TAGTTGGTCA	GCCAAGTTCT	GTACGTGCCG	5760

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ATGGGCTCAA	TCCAACCCCA	GGTCAAGTCT	TACCTGAAGA	GACATCGGGA	ACGAAAGAGG	5820
GTGACTTATC	AGAAAAACCA	GGAGACACCG	TTCTCACTCA	AGCGAAACCT	GAGGGCGTTA	5880
CTGGAAATAC	GAATTCACCT	CCGACACCTA	CAGAAAGAAC	TGAAGTGAGC	GAGGAAACAA	5940
GCCCTTCTAG	TCTGGATACA	CTTTTGTAAA	AAGATGAAGA	AGCTCAAAAA	AATCCAGAGC	6000
TAACAGATGT	CTTAAAAGAA	ACTGTAGATA	CAGCTGATGT	GGATGGGACA	CAAGCAAGTC	6060
CAGCAGAAAC	TACTCCTGAA	CAAGTAAAAG	GTGGAGTGAA	AGAAAATACA	AAAGACAGCA	6120
TCGATGTTCC	TGCTGCTTAT	CTTGAAAAAG	CTGAAGGGAA	AGGTCCTTTC	ACTGCCGGTG	6180
TAAACCAAGT	AATTCCTTAT	GAACATATCG	CTGGTGATGG	TATGTTAACT	CGTCTATTAC	6240
TAAAAGCTTC	GGATAATGCT	CCTTGGTCTG	ACAATGGTAC	TGCTAAAAAT	CCTGCTTTAC	6300
CTCCTCTTGA	AGGATTAACA	AAAGGGAAAT	ACTTCTATGA	AGTAGACTTA	AATGGCAATA	6360
CTGTTGGTAA	ACAAGGTCAA	GCTTTAATTG	ATCAACTTCG	CGCTAATGGT	ACTCAAACCT	6420
ATAAAGCTAC	TGTTAAAGTT	TACGGAAATA	AAGACGGTAA	AGCTGACTTG	ACTAATCTAG	6480
TTGCTACTAA	AAATGTAGAC	ATCAACATCA	ATGGATTAGT	TGCTAAAGAA	ACAGTTCAAA	6540
AAGCCGTTGC	AGACAACGTT	AAAGACAGTA	TCGATGTTCC	AGCAGCCTAC	CTAGAAAAAG	6600
CCAAGGGTGA	AGGTCCATTC	ACAGCAGGTG	TCAACCATGT	GATTCCATAC	GAACCTTTCG	6660
CAGGTGATGG	CATGTTGACT	CGTCTCTTGC	TCAAGGCATC	TGACAAGGCA	CCATGGTCAG	6720
ATAACGGCGA	CGCTAAAAAC	CCAGCCCTAT	CTCCACTAGG	CGAAAACGTG	AAGACCAAAG	6780
GTCAATACTT	CTATCAAGTA	GCCTTGGACG	GAAATGTAGC	TGGCAAAGAA	AAACAAGCGC	6840
TCATTGACCA	GTTCCGAGCA	AAyGGTACTC	AAACTTACAG	CGCTACAGTC	AATGTCTATG	6900
GTAACAAAGA	CGGTAAACCA	GACTTGGACA	ACATCGTAGC	AACTAAAAAA	GTCACTATTA	6960
ACATAAACGG	TTTAATTTCT	AAAGAAACAG	TTCAAAAAGC	CGTTGCAGAC	AACGTTAAG	7020
ACAGTATCGA	TGTTCCAGCA	GCCTACCTAG	AAAAAGCCAA	GGGTGAAGGT	CCATTCACAG	7080
CAGGTGTCAA	CCATGTGATT	CCATACGAAC	TCTTCGCAGG	TGATGGTATG	TTGACTCGTC	7140
TCTTGCTCAA	GGCATCTGAC	AAGGCACCAT	GGTCAGATAA	CGGTGACGCT	AAAAACCCAG	7200
CCCTATCTCC	ACTAGGTGAA	AACGTGAAGA	CCAAAGGTCA	ATACTTCTAT	CAATTAGCCT	7260
TGGACGGAAA	TGTAGCTGGC	AAAGAAAAAC	AAGCGCTCAT	TGACCAGTTC	CGAGCAAACG	7320
GTACTCAAAC	TTACAGCGCT	ACAGTCAATG	TCTATGGTAA	CAAAGACGGT	AAACCAGACT	7380
TGGACAACAT	CGTAGCAACT	AAAAAAGTCA	CTATTAACAT	AAACGGTTTA	ATTTCTAAAG	7440
AAACAGTTCA	AAAAGCCGTT	GCAGACAACG	TTAAGGACAG	TATCGATGTT	CCAGCAGCCT	7500
ACCTAGAAAA	GGCCAAGGGT	GAAGGTCCAT	TCACAGCAGG	TGTCAACCAT	GTGATTCCAT	7560

ACGAACTCTT	CGCAGGTGAT	GGCATGTTGA	CTCGTCTCTT	GCTCAAGGCA	TCTGACAAGG	7620
CACCATGGTC	AGATAACGGC	GACGCTAAAA	ACCCAGCTCT	ATCTCCACTA	GGTGAAAACG	7680
TGAAGACCAA	AGGTCAATAC	TTCTATCAAG	TAGCCTTGGA	CGGAAATGTA	GCTGGCAAAG	7740
AAAAACAAGC	GCTCATTGAC	CAGTTCCGAG	CAAACGGTAC	TCAAACCTAC	AGCGCTACAG	7800
TCAATGTCTA	TGGTAACAAA	GACGGTAAAC	CAGACTTGGA	CAACATCGTA	GCAACTAAAA	7860
AAGTCACTAT	TAAGATAAAT	GTAAAGAAA	CATCAGACAC	AGCAAATGGT	TCATTATCAC	7920
CTTCTAACTC	TGGTTCTGGC	GTGACTCCGA	TGAATCACAA	TCATGCTACA	GGTACTACAG	7980
ATAGCATGCC	TGCTGACACC	ATGACAAGTT	CTACCAACAC	GATGGCAGGT	GAAAACATGG	8040
CTGCTTCTGC	TAACAAGATG	TCTGATACGA	TGATGTCAGA	GGATAAAGCT	ATGCTACCAA	8100
ATACTGGTGA	GACTCAAACA	TCAATGGCAA	GTATTGGTTT	CCTTGGGCTT	GCGCTTGCAG	8160
GTTTACTCGG	TGGTCTAGGT	TTGAAAAACA	AAAAAGAAGA	AAACTAATCA	GCTAAGGAAA	8220
TAAATGATGG	ATAGTGGGCT	GACTAAGATT	AGTTTAACAA	CTCAATCAGC	AATCAGGACT	8280
TTCTTTCAAT	AGCAGATTAA	AATCATCGTA	AAACAATAAA	AATAGTGTTA	TACTTAAAGC	8340
AGTATAGCAC	TGTTTTTATC	AAAGGAGAGA	CAGATGGGAA	AGACAATTTT	ACTCGTTGAC	8400
GACGAGGTAG	AAATCACAGA	TATTCATCAG	AGATACTTAA	TTCAGGCAGG	TTATCAGGTC	8460
TTGGTAGCCC	ATGATGGACT	GGAAGCGCTA	GAGCTGTTCA	AGAAAAAACC	GATTGATTTG	8520
ATTATCACAG	ATGTCATGAT	GCCTCGGATG	GATGGTTATG	ATTTAATCAG	TGAGGTTCAA	8580
TACTTATCAC	CAGAGCAGCC	TTTCCTATTT	ATTACTGCTA	AGACCAGTGA	ACAGGACAAG	8640
ATTTACGGCC	TGAGCTTGGG	AGCAGATGAT	TTTATTGCTA	AGCCTTTTAG	CCCACGTGAG	8700
CTGGTTTTGC	GTGTCCACAA	TATTTTGCGC	CGCCTTCATC	GTGGGGGCGA	AACAGAGCTG	8760
ATTTCCCTTG	GCAATCTAAA	AATGAATCAT	AGTAGTCATG	AAGTTCAAAT	AGGAGAAGAA	8820
ATGCTGGATT	TAACGTGTTA	ATCATTTGAA	TTGCTGTGGA	TTTTAGCTAG	TAATCCAGAG	8880
CGAGTTTTCT	CCAAGACAGA	CCTCTATGAA	AAGATCTGGA	AAGAAGACTA	CGTGGATGAC	8940
ACCAATACCT	TGAATGTGCA	TATCCATGCT	CTTCGACAGG	AGCTGGCAAA	ATATAGTAGT	9000
GACCAACTC	CCACTATTAA	GACAGTTTGG	GGGTTGGGAT	ATAAGATAGA	GAAACCGAGA	9060
GGACAAACAT	GAAACTAAAA	AGTTATATTT	TGGTTGGATA	TATTATTTCA	ACCCTCTTAA	9120
CCATTTTGGT	TGTTTTTTGG	GCTGTTCAAA	AAATGCTGAT	TGCGAAAGGC	GAGATTTACT	9180
TTTTGCTTGG	GATGACCATC	GTTGCCAGCC	TTGTCGGTGC	TGGGATTAGT	CTCTTTCTCC	9240
TATTGCCAGT	CTTTACGTCG	TTGGGCAAAC	TCAAGGAGCA	TGCCAAGCGG	GTAGCGGCCA	9300

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AGGATTTTCC TTCAAATTTG GAGGTTC AAG GTCCTGTAGA ATTTTCAGCAA TTAGGGCAAA	9360
CTTTTAATGA GATGTCCCAT GATTTGCAGG TAAGCTTTGA TTCCTTGGA GAAAGCGAAC	9420
GAGAAAAGGG CTTGATGATT GCCCAGTTGT CGCATGATAT TAAGACTCCT ATCACTTCGA	9480
TCCAAGCGAC GGTAAGAAGG ATTTTGGATG GGATTATCAA GGAGTCGGAG CAAGCTCATT	9540
ATCTAGCAAC CATTGGACGC CAGACGGAGA GGCTCAATAA ACTGGTTGAG GAGTTGAATT	9600
TTTTGACCCT AAACACAGCT AGAAATCAGG TGGAAACTAC CAGTAAAGAC AGTATTTTTC	9660
TGGACAAGCT CTTAATTGAG TGCATGAGTG AATTTTCAGTT TTTGATTGAG CAGGAGAGAA	9720
GAGATGTCCA CTTGCAGGTA ATCCCAGAGT CTGCCCCGAT TGAGGGAGAT TATGCTAAGC	9780
TTTCTCGTAT CTTGGTGAAT CTGGTCGATA ACGCTTTTAA ATATTCTGCT CCAGGAACCA	9840
AGCTGGAAGT GGTGGCTAAG CTGGAGAAGG ACCAGCTTTC AATCAGTGTG ACCGATGAAG	9900
GGCAGGGTAT TGCCCCAGAG GATTTGGAAA ATATTTTCAA ACGCCTTTAT CGTGTGAAA	9960
CTTCGCGTAA CATGAAGACA GGTGGTCATG GATTAGGACT TGCGATTGCG CGTGAATTGG	10020
CCCATCAATT GGGTGGGGAA ATCACAGTCA GCAGCCAGTA CGGTCTAGGA AGTACCTTTA	10080
CCCTCGTTCT CAACCTCTCT GGTAGTGAAA ATAAAGCCTA AAACCCCTTT ACAAATCCAG	10140
CTATTCATGG TAGAATAGAT TTTGTGTGAA ATATCAGCAG GAAAGCATGA AGCTCGTCAA	10200
CAGGTGTCTT ATGACAAGTA ACCTTGGCTG TTTAGGCGAA GGGCATCTGC ACGG	10254

(2) INFORMATION FOR SEQ ID NO: 30:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 9769 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 30:

CCGGCGACTA TCGATAACAC TTGACTTGGT AGCCCCACAT TTTGGACAAC GCATCCTTTC	60
CCTCCTTATC GTTTTCTTTT CATTATACCA TTTTTTAAGC GATTCCCAA ACAATTCTTC	120
TTTTTGCTTG ACAAGTTTTT TGTTTTGTTG TATTATTTAA TTAAGACAAC AAGGTAAAAG	180
AAAGGAGACT AAGATGTCCT GGACATTTGA CAACAAAAA CCCATCTATT TACAGATTAT	240
GGAGAAAATC AAGCTTCAGA TTGTTTCCCA TACTGGA CCATCAAC AACTTCCAAC	300
CGTGAGGAGC TAGCTAGCGA GGCTGGTGTC AATCCCAATA CCATCCAAAG AGCCTTATCA	360
GACCTTGAAC GAGAAGGATT TGTCTACAGC AAGCGAACAA CTGGACGATT TGTGACTAAG	420
GATAAGGAGC TAATCGCCCA GTCACGCAA CAATTATCAG AAGAAGAATT GGAACACTTC	480

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GTTTCCTCCA	TGACCCATTT	TGGCTATGAA	AAAGAAGAAC	TACCAGGCGT	AGTCAGTGAT	540
TATATTAAAG	GAGTTTAAGC	CTATGTCATT	ACTAGTATTT	GAAAATGTAT	CCAAATCATA	600
TGGAGCAACA	CCAGCCCTTG	AAAATGTTTC	TCTTGACATT	CCAGCTGGAA	AAATTGTCGG	660
CCTTCTTGGG	CCAAACGGCT	CAGGAAAAAC	AACCCTGATT	AAACTAATTA	ATGGCCTCTT	720
ACAACCAGAT	CAAGGACGTG	TCCTCATCAA	CGACATGGAC	CCAAGCCCAG	CAACCAAGGC	780
CGTTGTAGCT	TATTTGCCTG	ATACGACCTA	TCTCAATGAG	CAAATGAAGG	TCAAAGAAGC	840
CCTAACCTAC	TTCAAGACCT	TCTATAAAGA	TTGTCAGATC	TTGAACGCGC	CCATCATCTA	900
CTTGCGAGACC	TGGGCATTGA	TGAAAATAGT	CGTCTCAAGA	AACTATCAAA	AGGAAACAAA	960
GAAAAGGTTT	AACTGATTTT	GGTTATGAGC	CGTGATGCTC	GTCTCTATGT	TTTGGACGAA	1020
CCCATTTGGTG	GGGTGGATCC	AGCAGCCCGT	GCTTATATCC	TCAATACCAT	TATCAACAAC	1080
TACTCACCAA	CTTCTACCGT	TTTGATTTCT	ACCCACTTGA	TTTCTGATAT	CGAGCCAATC	1140
TTGGATGAAA	TTGTCTTCCT	AAAAGACGGA	AAAGTCGTCC	GTCAAGGAAA	TGTAGATGAT	1200
ATTCGCTACG	AGTCAGGTGA	ATCCATTGAC	CAACTCTTCC	GTCAGaATTT	AAGGCCTAAG	1260
CAAAGGAGAT	TATTTATGTT	TTGGAATTTA	GTCGCTACG	AATTTAAAAA	TGTTAACAAG	1320
TGGTATTTAG	CCCTCTACGC	AGCCGTGCTA	GTCCTTTCTG	CCCTCATCGG	AATACAGACA	1380
CAAGGCTTTA	AAAATCTACC	TTACCAAGAA	AGTCAGGCTA	CTATGCTACT	TTTTCTAGCT	1440
ACAGTCTTTG	GTGGCTTGAT	GCTTACACTT	GGGATTTCAA	CCATTTTCTT	GATTATTAAA	1500
CGCTTCAAAG	GTAGTGTCTA	CGACCGACAA	GGCTATCTGA	CTTTGACCTT	GCCAGTTTCT	1560
GAACACCATA	TCATCACAGC	CAAATAATC	GGTGCCTTTA	TCTGGTCATT	GATTAGCACC	1620
GCTGTATTGG	CTCTAAGTGC	TGTTATTATT	CTGGCTTTAA	CAGCTCCAGA	ATGGATTCCCT	1680
CTTCTTTATG	TGATTACATT	TGTAGAAACA	CATCTCCCTC	AGATCTTTCT	TACAGGTATA	1740
TCCTTCCTAC	TAAATACTAT	TTCAGGAATC	CTCTGCATCT	ACCTGGCTAT	TTCCATTGGA	1800
CAGCTTTTCA	ATGAATACCG	TACAGCACTC	GCTGTTGCAG	TCTACATTGG	TATCCAAATC	1860
GTCATTGGAT	TTATTGAAC	TTTCTTCAAT	CTTAGTTCTA	ATTTCTATGT	CAATTCACTG	1920
GTAGGACTCA	ATGACCATTT	CTATATGGGA	GCAGGTATAG	CCATTGTTGA	AGAACTCATA	1980
TTCATAGCTA	TCTTTTATCT	CGGAACCTAC	TACATCTTGA	GAAATAAGGT	TAATTTGCTT	2040
TAAATAATTT	TTACCTAGAT	ATGTAACATA	CTCATAGAAC	AAAAGAGACC	AGGCAAAAAG	2100
TCTTTAAAAT	TAGAAAACGC	ATAGTATCAG	GTGTTGAATA	TGTACTGCcC	CCCAAAAGTT	2160
AGATTTTTTC	TGTCTAACTT	TTGGGGGCAG	TTCATAAGAA	CCTTGGTAAT	ATGCGTTTTT	2220

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TGTGAGCTGA	CTTATTTTCCT	TTCACTATAT	CGCAAAATGA	AATAAGAACG	GAACGATGGG	2280
ATTTTGGAAT	TCAAATCAAT	TTATAAGAAT	GTTTTAGAAG	TAATATTATC	CTATTCCAGA	2340
TTCAGTTCAC	TATACAATTG	AGTTTTCAAG	CAACCTGTTT	ACATAATGTG	TACATAATTA	2400
GGTTCGTGAT	TCCACCCTTT	TCACCTTTAA	AAACCTCGCT	TTCGCAAGGC	TCTTCTATTT	2460
ATAAGATAAG	GCACGTTTAA	AGGTTTTTCCA	AATCCCTAAA	TCATCCGTTT	GAAGAACGAG	2520
ACTAGCATAC	ATGCGTCCGA	TAAATCCTGT	TGCTACCACC	GCAAAAATCA	CTGTAATAGC	2580
AAGTGAAATC	CATGCTTCTG	CTCCCCCGC	ATAGTCATTA	ATCGTTCGAA	ACGGCATAAA	2640
GAAGGTCGAA	ATAAAGGGAA	TATAAGAACC	AATCTTCAAG	AGGAGATTGT	CACCAGCTGC	2700
ACCTAGAGCT	GTCACTCCAA	AAAAACCACC	CATAATCAAA	ATCATCAAAG	GCGACAAGGC	2760
TTTCCCTGAG	TCCTCAGGAC	GAGAAACCAT	AGATCCTAGG	AAGGCTGCCA	AGACTACGTA	2820
CATGAAAAGA	CTGATCAAAA	TAAAGAGCAA	GGTATTCAGT	GAGATAGCAT	CTCCCAAGTG	2880
ATCCAAAATA	CCAGACTGAG	CCAAGAATGG	CAAATCTTTA	AAGAGCAAAA	CGGCAGCCAG	2940
ACCACCTACA	ACATAGATCC	CAATATGCGT	TAAAATCACT	AGAAACAGAG	CCATCATCCG	3000
CGCATAGAAA	TAGTGACTTG	CCCTTATGCT	AGAAAAACG	ACTTCCATAA	TTTTGGTGCC	3060
TTTTTCACTG	GCAACTTCCT	GAGCTGTTAC	ACCCGCATAG	GTAATCAGAA	TCATATAAAG	3120
AAAGAATCCT	AAGGCACCTG	CTGCAATTGT	TTGAATAAAC	TTTTTATTTT	CCTTGGCTTC	3180
ATCAATCTTT	TCTGTGAATT	GAATTGTCTG	CGCTAAGCGT	TTTTCCTGCT	CTTGAGACAA	3240
GGAAGCAGTT	GAACGATTAA	GCTGATTTTG	CAGTTCATTG	AGTGTAACCTG	TAACCTCAAA	3300
TTTAATTCCA	TTTTCAAGCG	ATGTTTCGCC	ATGATAAACT	GCCTTTAGAA	CACTATCTTC	3360
TTGATCAATG	GTCAAATAAC	CTTTTAATTT	TTCTTCTTTA	ATTGCTTCTT	TGGCACTTGC	3420
TTCGTCTTTA	TAGTCGAAGT	TAACACCATT	TACATTCTTC	AGTCCTTCTG	CTACAGATGG	3480
CACTGTTGTC	ACTACTGCCA	CTTTATTATT	TTTAGCCATA	GAAGAACCTT	GGAGATGCCC	3540
AATTCCTACA	GAGATTCCTA	AAAAGAGGAA	CGGCGAAATC	ACCATAAAGA	AGAAACTCCA	3600
TGACTCGACA	TGTCGAAGAT	AGGTTTCCTT	GATTACAACC	CACATATTTT	TCATACTTCC	3660
ACTCCTGATT	CTAGTTTAAA	GATTTTCATCG	ATAGTTGGCG	CTTGTTGGTC	AAATGTTGCG	3720
ATATATTGAC	CTTGAGTCAA	GATTGAGAAG	AGTTCCTTTC	CAGCGCTCTC	ATCCTCCAAA	3780
ATCAATTTCC	AACTGCCTTG	TTTGGTCAAG	CTCACCTGTT	TGACATGAGG	AAGATTTTCC	3840
AATTCTTCCT	TGCTTCGTTT	ACTTGAAACA	AAGAGACGCG	TTTTCCCGTA	TTGATTGCGG	3900
ACATCCTGAA	CTGGTCCGTG	CAAGACCACA	CGGCCATCTC	GGATCATCAG	AATATCGTCA	3960
CAAAGTTCCT	CAACATTGGT	CATGACATGG	TCAGAAAAGA	TAATGGTTGT	CCGCGCTCTT	4020

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TTTCCTGAAA	AATGACTTGT	TTGAGCAATT	CTGTATTAAC	TGGGTCCAAT	CCACTAAAAG	4080
GCTCATCCAA	GATAATCAGG	TCTGGTTCAT	GAATCAGAGT	AATAATGAGC	TGAATCTTCT	4140
GCTGATTTCC	TTTTGACAGA	CTCTTGATTT	TATCTGTCAG	CTTTCCTTTC	ACTTCCAACC	4200
TCTTCATCCA	TTGAGGGAGT	TTTTCTTTGA	CTTCTTTGGC	ATCCATGCCT	TTTAGAGTCG	4260
CCAAGTAGCG	AACTTGTTCA	AGAACTGTCA	ATTTAGGCAT	GAGATGCGTT	CTTCAGGCAG	4320
ATAACCAATC	CGAGCATAGG	TCTCCTGACG	AATATCCTGA	CCATCCAGAC	CGATTTCTCC	4380
CTGATATTCT	AGGAATTTCA	AAATACTATG	GAAAATCGTT	GTTTTTCCAG	CACCATTTTT	4440
TCCGACTAGT	CCCAAATAC	GACCTGGTCG	CGCTTGAAAG	TCAATACCAA	ACAAAACCTG	4500
CTTGATCCA	AACTTTTCT	CTAGACTTCT	TACTTCTAGC	ATCTTTCACC	TCCGAAATTT	4560
CTTGCACTCA	TTATACTCCT	TTTTGATAGC	CTTTACAATG	TTTTTTGTCC	ATTTTGTAGAA	4620
GACTATTGCT	GTGTAAAATA	TGGCCTGGAG	CACTTTTATA	CTCAATGAAA	ATCAAAGAGC	4680
AAACTAGGAA	GCTAGCCGTA	GACTGCTCAA	AGTACAGCTT	TGAGGTTGCA	GATAAAACTG	4740
ACGAAGTCgA	CTCAAAACAC	TGTTTTGAGG	TTGTGGATAG	AACTGACGAA	kCrTAaCTAT	4800
ATCTACGGCA	AGGCGAAcTG	ACGTGGTTTG	AAGAGATTTT	CGAAGAGTAT	TAGTGATAAA	4860
TCCATTATAC	AGCAGCAAAC	TTAATTTATA	CCTTCCGCTC	CTCAACTGTC	TATTTTAAAT	4920
CCTGAATTGT	TATTTGAGTA	ACTCCTTTTT	CCTCGTAAAG	TTTTCTTCCT	CTAAAACCTC	4980
TGAAAAAAGG	CTAATAGTTT	CAGACAACAT	TTTTATAAGA	AACAAGTTCA	TCTGTCATTT	5040
CAAGAAGGAG	TAATCCTTTA	TCTACTAATG	GACGGAACAG	AATTCAACCG	CTTGTCCGAT	5100
ATGTTTTCTA	AGGATTATAT	AGTAAAATGA	AATAAGAACA	GGACAAATTG	ATCAGGACAG	5160
TCAAATTGAT	TTCTAACAAT	GTTTTAGAAG	TAGATGTATA	CTATTCTAGT	TTCAATCTGC	5220
TATATCTATT	ATGCACACCC	CTATAGGATC	TAATGAAAAT	CACAACAGGC	TCATTCATAG	5280
ATGGTTACCT	AAGCCTAAGG	GAAC TAAGAA	AACGACTACC	AAGGAAGTCG	CATTCATCGA	5340
AAAGTAGATT	AACAAC TATC	CTAAAAAATG	CTTGAACTAC	AAGTCCCCCA	GAGAAGACTT	5400
CTGGATGACT	AACTTGAACT	TGAAATTTAG	CAATAATTAA	TTCATCTATCT	AACTATATTT	5460
AGTAATTATT	TCAGAACTGA	TTAATATTAA	AATTAAC TAA	CAATTCAAAG	GATTCATACT	5520
AGCCATAAAT	TACGTCCATC	AGAGAGAGAC	TCTTACTACT	TTTAGATTTT	AGTCTTTCTA	5580
GCTTCAGAAT	ACATCTAAAC	TTTAGGGAAA	ATGACTATTC	GAAAGCGCGA	ATGCCTCAAA	5640
ATTATCTCAG	ATAAGCTATT	CGAAACTTAG	AATGCTTTTA	AATTTATGGA	ATTGCGATTA	5700
TTCGAAACCT	AGAATGCATA	TAACCTTTAG	TTGACAGACC	TATTCTAAGT	CTCGAAGGGC	5760

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TATTTACTTT	CTATTCCTTA	TCAAAAAAGA	CTCATTCCCC	CTTTCTCCTC	CAAAATATGG	5820
TATAGTAGAA	ATATACTATC	TATGAGGAGT	TTACATGTCA	CAGGATAAAC	AAATGAAAGC	5880
TGTTTCTCCC	CTTCTGCAGC	GAGTTATCAA	TATCTCATCG	ATTGTCGGTG	GGGTGGGAG	5940
TTTGATTTTC	TGTATTTGGG	CTTATCAGGC	TGGGATTTTA	CAATCCAAGG	AAACCCTCTC	6000
TGCCTTTATC	CAGCAGGCAG	GCATCTGGGG	TCCACCTCTC	TTTATCTTTT	TACAGATTTT	6060
ACAGACTGTC	GTCCCTATCA	TTCCAGGGGC	CTTGACCTCG	GTGGCTGGGG	TCTTTATCTA	6120
CGGGCACATC	ATCGGGACTA	TCTACAAC TA	TATCGGCATC	GTGATTGGCT	GTGCCATTAT	6180
CTTTTATCTA	GTGCGCCTAT	ACGGAGCTGC	CTTTGTCCAG	TCTGTCGTCA	GCAAGCGCAC	6240
CTACGACAAG	TACATCGACT	GGCTAGATAA	GGGCAATCGT	TTTGACCGCT	TCTTTATTTT	6300
TATGATGATT	TGGCCCATTA	GCCCAGCTGA	CTTTCTCTGT	ATGCTGGCTG	CCCTGACCAA	6360
GATGAGCTTC	AAGCGCTACA	TGACCATCAT	CATTCTGACC	AAACCCTTTA	CCCTCGTGGT	6420
TTATACCTAC	GGTCTGACCT	ATATTATTGA	CTTTTTCTGG	CAAATGCTTT	GACACGTAAA	6480
AAATCCGTTT	GGTTTCCCAA	GTGGATTTTT	AAAGCGTAGA	TTAACTATAG	CTTGATACTA	6540
AATATACTTT	GGTATGGAAA	TCATGCATAT	TTTTTCGATAG	TGAGGCGAGG	ACTTACCTAG	6600
CCTTTCCGCC	GTGATAGAAA	CACCTGAAAT	CTAATGGTTT	CAGGTATTCTG	GAAACTTTGA	6660
GCCTAGTGTC	TCAAAGTTTA	GGTATGGAAT	TTTGAAGAAA	GTCGCTACCG	TCCGTAATCA	6720
CTTAAGGAAA	GGCTCAAAAA	TATTGTTTTT	AACCACAAAA	TCCGTTTGGT	TTCCCAAGCG	6780
GATTTTGTGC	TTTATTTTGA	AACTTCTTTT	GCAAGAACAA	AGTTCCCAAG	TGTGGCAGAA	6840
CCATTTCTTG	CGACTGCTGG	CGTCACGATA	TAGTCACGCA	CATCTGGTAC	TGGTAGGTAA	6900
CCATTAAGAA	GAGATGTAAA	TTTCTCACGG	ACACGGTCCA	GCATATGTTG	TTGAGCCATG	6960
ACCCCTCCAC	CAAAGACAAT	CACGTCTGGG	CGGAAAGTCA	CTGTGCGATT	AACCGCAGCT	7020
TGAGCGATAT	AGTAGGCTTG	AACATCCCAA	ACAGGGTTGT	TGAGTTCAAT	AGTTTCCCCA	7080
CGTACACCTG	TACGAGCTTC	CAAAC TTGGA	CCAGCTGCAT	AACCTTCTAG	ACATCCCTTA	7140
TGGAAAGGAC	AAACACCCTT	AAACTCTTTT	TCAATATCCA	TTGGGTGTCT	AGCAACATAA	7200
TAATGACCCA	TTTCAGGGTG	ACCCACACCA	CCGATAAACT	CACCACGTTG	GATGACGCCT	7260
GCACCGATAC	CTGTACCGAT	TGTGTAGTAA	ACCAAGTTTT	CGATACGACC	ACCAGCATTG	7320
TTACGGGCAA	CCATTTCAAC	GTAAGCAGAG	CTGTTTACGT	CTGTTGTGAA	GTACATTGGC	7380
ACGTTTAGGG	CGCGACGAAG	GGCACCAAGC	AAGTCTACAT	TTGCCAGTT	TGGTTTTGGA	7440
GTCGTCGTGA	TAAAGCCATA	AGTTTTTGAG	TTTTTGTCAA	TATCAATCGG	CCCAAATGAA	7500
CCAACTGCAA	GACCAGCAAG	GTTATCGAAT	TTTGAGAAGA	ACTCAATGGT	TTTATCGATT	7560

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GTTTCGATTG	GAGTTGTTGT	TGGAAATTGT	GTTTTTTCTA	CAACGTTAAA	GTTTTCATCA	7620
CCGACAGCAC	AGACAAACTT	TGTACCGCCC	GCTTCCAAGC	TTCCATATAA	TTTTGTCATG	7680
ATAAACCTCT	TGTTTTTATT	TTCTTTATTA	TAGCATACTT	CGAAAGTCTA	AATGTCTCTA	7740
TTTTTTTAGAT	TTTCCTCTGT	AAATCTTACT	ATCTAATAAA	AACGAACAAA	CATGTCATTT	7800
GTTCGTTTTT	ACATTAGAGA	GGATTGATTA	GATTTTCACT	TCGATCACAG	CATCCCCCTT	7860
AGCAACTGAA	CCTGTTGCGA	CTGGAGCTAC	TGAAGCGTAG	TCACCTGTAT	TTGTAACGAT	7920
AACCATTGTT	GTATCATCAA	GTCCAGCTGC	AGCGATTTTG	TTTGAGTCAA	ATGTTCCAAG	7980
AACATCGCCA	GCTTTCACCT	TATTACCTTG	AGCAACTTTT	GTTTCAAAAC	CGTCACCGTT	8040
CATAGATACA	GTATCAATAC	CAACATGAAT	CAAACTTCA	GCACCATTTT	TTGTTTTCAA	8100
ACCAAAAGCG	TGCCCTGTTG	GAAAGGCAAT	TGAACTTCA	GCATCAGCTG	GTGCATAGAC	8160
CACGCCTTGG	CTTGGTTTCA	CAACGATACC	TTGTCCCATA	GCTCCACTTG	AGAAGACTGG	8220
GTCATTGACA	TCAGCAAGAG	CGACAACATC	ACCGACGATA	GGAGTTACAA	GTGTTTCATT	8280
TTGAAGAGCT	GCTGGCGCAA	CTTCTTCTTT	TTCTTCAGCC	ACTTCAGCTC	GTTTTGCAGC	8340
TGCAGTTGCG	TCTACTTCAT	CTTCGTAACC	AAACATGTAA	GTAAGAGCAA	AACCAAGGGC	8400
AAATGATACA	GCTACCATAA	GAAGGTATTG	TGGAAGTTGT	CCGTTACCAA	CATAAAGCAT	8460
TGTACCAGGG	ATGATGGTGA	TACCATTACC	AGTACCAGCA	AGTCCAAGGA	TAGAAGCCAA	8520
TCCACCACCG	ATTGCACCAG	CAATCAATGA	AAGGAAGAAT	GGTTTACGGA	AGCGCAAGTT	8580
CACCCCGAAG	ATAGCAGGCT	CTGTAATACC	TAGGAAGGCA	GAAAGAGCAG	CCGGGAAAGC	8640
AAGTGTTTTT	AGTTTTGGAT	TTTTTGTTTT	AACACCAACC	GCAACAGTAG	CAGCACCTTG	8700
AGCTGTCATA	GCAGCTGTGA	TGATAGCGTT	GAATGGGTTA	GCATGGTCAG	CAGCAAGTAA	8760
TTGCACTTCA	AGCAAGTTGA	AGATGTGGTG	CACACCTGAC	ACGACGATCA	ATTGGTGAAC	8820
CCCACCAATC	AAGAAACCAC	CAAGACCAAA	TGGCATGCTA	AGAATCGCTT	TTGTAGCAAT	8880
AAGGATGTAG	TTTTCAACAA	CGTGGAAAAC	TGGTCCAATG	ACAAAGAGTC	CAAGGATAGA	8940
CATGACCAAA	AGTGTCACGA	ATGGTGTTAC	CAAGAGGTCA	ATGACATCTG	GAACAACCTG	9000
CGGACAGCTT	TTTCAAATTT	AGCTCCGACA	ACCCCGATGA	TGAAGGCTGG	AAGAACGGAA	9060
CCTTGCAAAC	CAACAACAGG	GATGAAACCA	AAGAAGTTCA	TCGCTGTTAC	TTCACCACCT	9120
TGAGCAACTG	CCCAAGCGTT	TGGAAGTGAG	CCAGAGACAA	GCATCATACC	AAGAACGATA	9180
CCAACGGCAG	GATTTCCACC	AAATACACGG	AAGGTTGACC	ACACAACCAA	ACCTGGCAAG	9240
ATGATGAAGG	CTGTATCTGT	CAAGATTTGT	GTGTAAGTTG	CAAAGTCACC	TGGAAGTGCC	9300

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ATTTCAAGAG	CGTTGAAAAG	ACCACGCACA	CCCATGAAGA	GACCTGTCGC	TACGATAACT	9360
GGGATGATTG	GAACGAAAAC	ATCACCAAAA	GTACGGATAG	CACGTTGGAA	CCAGTTC CCT	9420
TGTTTAGCAA	CTTCTGCTTT	CATGTCATCC	TTAGATGATG	TTGGTAATCC	AAGTACAACA	9480
ACTTCATCGT	ACATTTTGTT	AACTGTACCT	GTACCAAAGA	TAATTTGGTA	TTGCCCTGAG	9540
TTAAAGAAAG	CACCTTGAAC	TTTTTCCAAG	TTCTCAATCA	CTTCTTTATT	GATTTTCTCT	9600
TCATCTTTGA	CCATGACACG	TAGACGAGTC	GCACAGTGGG	CAACACTATT	GACATTTTCA	9660
CGTCCGCCCA	AGGCATCGAT	GACTTTTTTTT	GCAATTTTCT	GATTGTTTCT	TTGCAAAAAT	9720
CTCCTTATAT	AACATTTTGT	TCTTGTTTGA	AAGCGATTTT	ATTCGCCGG		9769

(2) INFORMATION FOR SEQ ID NO: 31:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3149 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 31:

CGCTTGAGTG	CTAATTCATA	GTTCTATTGT	ATCACTTGGT	CAGAAATAAT	CAAGAAAAAA	60
GTCTGACTTT	CTCAAGATAA	AAAGCCTGAG	ACCAACTCAG	ACTTTTAAAT	TCTTAAATG	120
GCAATTCTTC	CTCTTCCAAG	ACCAAATCTG	CCAAATCTTG	GCCTGCATTA	TTTTCACGCA	180
TAGCACGTTG	GGCACGACTT	TCCAAGAGTT	GGAATCCTGT	GACAAGTACT	TCGGTCACGT	240
AGTTCATTTG	GCCATTTTTC	TCAAAGCGAC	GGGTACGCAA	TTCTCCATCA	ACGGAAATGA	300
GACTACCTTT	GGTTGCGTAC	TTGCCAAAGT	TTCTGCTAGT	CTGCCCCATA	GGACCATATT	360
GACAAAATCA	GCTTCACGTT	CACCGTTTTG	GTCTTTGTAA	CGACGGTTCA	CAGCGATAGT	420
TGCTCGCGCT	ACCGACTTGT	CATTGTTGGT	TTTGTGCAAT	TCTGGTGTAG	ACGTTAAACG	480
TCCAATCAAG	ATAACTTTAT	TATACATATT	TTCTTCCTCC	TACTTATCTA	TTCGTAGGAA	540
ATCAAAAAAA	GTTACAGAAA	TTTGTAACCT	TTGAGAAAAA	TTTTTTTATT	TTTATGAACC	600
ATGAAACCTG	TCGCCTGTTG	ATTGGCCATA	ATGGTCATAT	CTGTAATCTG	AACACGACGA	660
GGTTGACTAG	TCACATAGAC	TACTGTATCT	GCAATATCCT	GAGCTTGCAA	AGCTTCTATT	720
CCTTGGTAAA	CGGACGCAGC	TCGTTCTTTA	TCACCATGAA	AACGCACTGT	AGAAAAATCT	780
GTTTCGACAA	TTCCAGGCTG	AATGGTCGTC	ACCTTGATAT	CCGTTGCGAT	GGTATCAATT	840
CGCAGTCCAT	CTGAAAAGGT	CTTAACTGCC	GCCTTGGTGG	CTGAGTAAAC	AGCTGCACCA	900
GCATAGGCAT	AAATTCCTGC	GGTTGACCCC	ATATTGATAA	TATGACCTTG	ATTGGCTTTT	960

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ACCATTGCTG	GCAAGAAACA	GCGAGTGACT	GCCATCAAAC	CTTTGACATT	GGTATCCAAC	1020
ATGGTCAGCA	TATCCAACCTC	TTCATAGTCT	TGATAGGGAG	CTAAGCCAAG	AGCCAGTCCT	1080
GCGTTATTGA	CCAGGATGTC	AATCTGACCT	ATCGTTTCTA	AAATATCAGA	GCAGACAGTC	1140
TTTACCATTG	TCATATCCGT	GACATCTAGG	AGAAAAGTCC	AAACTGTTTG	ATTTGGAAAA	1200
GTTTCTGCAA	ACTCCGCCTT	AAGAGCTTCT	AGTCTGTCTA	TCCGTCGTCC	TGTTAGAACG	1260
ACATCCTCAC	CCTGCTCCAG	ATAAGCACGC	GCAATCGCTT	CACCGATTCC	TGATGTCGCT	1320
CCTGTAATCA	CAACATTTTT	TGCCATCTTA	TTTCCTTCTA	GCTGGTCTAT	CAGATATTAA	1380
CAACTTCTTA	GGCAGTCCAG	TGTTTCGCTG	GGTCGAACGG	TGTTCCGACA	ACTTGGTCTT	1440
CTGATAATTC	AAGCACCCCA	CGTTTTTGTG	GAGCATTTGG	CAGATGCAAT	TCACGAGGAC	1500
TGCACATCAT	ACCAAAACTC	TTTTCAACCAC	GAAGTTCACC	TGGGAAAATG	AGATTCCCTT	1560
TTGGCATCAT	AGCTCCAGGA	AGCGCGACAA	TGGTTTTCAA	CCCCACACGC	GCATTGGGAG	1620
CTCCTGCAAC	GATTTGTACA	GTCTTATCAC	TTGCGACTGC	AACTTGGCAG	ATGTTGAGGT	1680
GGTCACTATC	TGGATGGGCT	ACCATCTCAA	CAATTTTACC	TACAACAAAC	TTAGGTTCCCT	1740
TATCATTAAC	AATTTCTTCT	GTAAAACCTT	CCGCCTGCAA	CTCTTGTTTC	AAACGAGCGA	1800
CTTGCTCATC	TGTCAAAAAG	ACTTGACCGC	GCTCTGCAAT	TTCAAATAAA	CTTGAAACTT	1860
CGAAAATATT	CCAAGCCACT	GTTTCCCCAT	TATCTTTGAG	AAAAACACGG	GCTACCTTGC	1920
CTTTGCGCTC	CACATCCAGT	TTGGCATCTC	CGCTATTTTT	CACGATGACC	ATAAGGACAT	1980
CACCGACATG	TTCTTTATTA	TATGTAAAAA	TCATTGTTTC	CTTTTTCTCC	TATTTGAGTC	2040
CTGCTAAAAA	GTCATTGATT	TGTTGCTTGC	TTTTACGGTC	GCGATTGACA	AAACGACCGA	2100
TTTCCTTGTC	CTTTTCTAGA	ACAACAAGGC	TAGGAATTCC	GTAAACATCC	CAGAGTTTGG	2160
CCAAATCCAT	ATACTGATCT	CGGTCCATTC	GAATAAAGGT	GAAGTCTGGA	TTGGTCTCCT	2220
CAATCTCTGG	TAAGGCAGGA	TAAATATAAC	GACAATCGCT	ACACCAGTCT	GCCACAAAAA	2280
TGAAGACCTT	CTTGCCCGCT	TTTTCCACTA	AAGATGCTAA	TTCTTCTAAA	CTTGCTGGCT	2340
GTATCATAAG	ACTTCCTCCT	CATAGACTAG	GTCTTCATTT	TCATAGACAA	AGGTATAATG	2400
ACGGCCATCC	TCAAAAATGA	CGCCACCAAC	CAAGCTCTCC	AGACTGCTTT	CGTAAACTTG	2460
AACATAAAGG	GTCGCAATTT	CCCCCATGTC	GGAAAAATGG	TCTCGCACAA	TCTCTGTCAA	2520
CTCTTCCTGA	GTCTTCATGA	GCTTACGGTC	ATCTGCAACT	TTTTTCGTAG	CAAGAGCAAG	2580
GCTTCCGATA	CCTAGCAGAG	CCAAGCCTGC	CATCCACATT	TTTTTAGCTT	TCATACCATT	2640
CATTTTAACA	CAAAAAGGC	TTCAGGACAA	ATGAGGAAGC	AGCAGAAAAG	CAAGTAAAAA	2700

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GCCTCTTCCT TTAAGGAAAA GGACTTCTTA TACTCAATGA AAATCAAAGA CCAAAC TAGG	2760
AAGCTAGCCG CAGGCTGCTC AAAGCACTGC TTTGAGGTTG TAGATAGAAC TGACGAgTCa	2820
CTCAAAACAC TGTTTTGAGG TTGTGGATGA AGCTGACGTG GTTTGAAGAG ATTTTCGAAG	2880
AGTATTATTC TTATTGCCAG GCACCTAAGT TGCCAACGTA GTAAC TATCA GGTGTGTAGG	2940
TATTGCGAGC ATCTTACCTG ATGAAGCCAG ATAATACTAC TTGCCATTGT CTTTGACCCA	3000
ATCATTCGCA ATCATGGAAC CAGAAGAACT TACATAATAC CATTCTCCCT TGCATAAAC	3060
CCAAGTACTG ACTTTCATGG TTCCTGAGCA ATTAAAGGCA AAAAAACTGT CCAATAACAT	3120
TCGTTTTTTA AAAGCATTTG ACACTACAT	3149

(2) INFORMATION FOR SEQ ID NO: 32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 32:

CCAAAAATTC AACCTTTAAG GGGAGTCCAG AGAGACTCAC AAGGTGTCAG ATAAAAGAAT	60
GGTGCAATTT TCTAGAGGAG ACTTTTGTAG TGTGCTCTCT TGTGTTGTAC GATTTTAACT	120
GAGGCCTTGC ACTAGCAAGG TCTTTTCTTT ATCTGGTCCC CTTAAAATTT AAGGAGGAAA	180
AGTTATGAAT CCCACATGTA AGAAGCGTTT GGGTGTGATT CGGTTGGAAA CCATGAAGGT	240
GGTTGCACAA GAGGAAATCG CGCCACAATC TTTGAATTAG TCCTAGAAGG AGAAATGGTT	300
GAAGCCATGC GAGCAGGCCA ATTTCTTCAT CTGCGTGTAC CGGACGATGC CCATCTCTTA	360
CGTCGTCCTA TTTCAATTTT GTCTATTGAC AAGGCAAACA AGCAGTGTCA CCTCATTTAT	420
CGGATTGACG GAGCTGGGAC TGCAATTTTT TCAACCTTAA GTCAGGGAGA CACTCTTGAT	480
GTGATGGGGC CTCAGGGAAA TGGTTTTGAC TTGTCTGACC TTGATGAGCA GAATCAGGTT	540
CTCCTTGTTG GTGGTGGGAT TGGTGTTCCT CCCTTGCTTG AGGTGGCCAA GGAATTGCAT	600
GAACGTGGAG TGAAAGTAGT GACAGTCCTC GGTTTTGCTA ATAAGGATGC TGTTATTTTG	660
AAAACGGAAT TGGCTCAGTA TGGTCAGGTC TTTGTAAACGA CAGATGATGG TTCTTATGGC	720
ATCAAGGGAA ATGTTTCCGT TGTTATCAAT GATTTAGACA GTCAGTTTGA TGCTGTTTAC	780
TCGTGTGGGG CTCCAGGAAT GATGAAGTAT ATCAATCAAA CCTTTGATGA TCACCCAAGA	840
GCCTATTTAT CTCTGGAATC TCGTATGGCT TGTGGGATGG GAGCTTGCTA TGCCTGTGTT	900
CTAAAAGTAC CAGAAAACGA GACGGTCAGC CAACGCGTCT GTGAAGATGG TCCTGTTTTT	960

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CGCACAGGAA	CAGTTGTATT	ATAAGGAGAA	AATTATGACT	ACAAATCGAT	TACAAGTTTC	1020
TCTACCTGGT	TTGGATTTGA	AAAATCCGAT	TATTCCAGCA	TCAGGCTGTT	TTGGCTTTGG	1080
ACAAGAGTAT	GCCAAGTACT	ATGATTTAGA	CCTTTTAGGT	TCTATTATGA	TCAAGGCGAC	1140
AACCCTTGAA	CCACGTTTTG	GGAATCCAAC	TCCAAGAGTG	GCAGAGACGC	CTGCTGGTAT	1200
GCTCAATGCA	ATTGGCTTGC	AAAATCCTGG	TTTAGAGGTT	GTTTTGGCTG	AAAAGCTACC	1260
TTGGCTGGAA	AGAGAATATC	CAAATCTTCC	TATTATTGCC	AATGTAGCTG	GTTTTTCAAA	1320
ACAAGAGTAT	GCAGCTGTTT	CTCATGGGAT	TTCCAAGGCA	ACTAATGTAA	AAGCTATCGA	1380
GCTCAATATT	TCTTGTCCCA	ATGTTGACCA	CTGTAATCAT	GGACTTTTGA	TTGGTCAAGA	1440
TCCAGATTTG	GCTTATGATG	TGGTGAAAGC	AGCTGTGGAA	GCCTCAGAAG	TGCCAGTTTA	1500
TGTCAAATTA	ACCCCGAGTG	TGACCGATAT	CGTACTGTC	GCAAAAGCTG	CAGAAGATGC	1560
GGGAGCAAGT	GGCTTGACCA	TGATCAATAC	TCTGGTTGGA	ATGCGCTTTG	ACCTCAAAAC	1620
TAGAAAACCA	ATCTTGGCCA	ATGGAACAGG	TGGAATGTCT	GGTCCAGCAG	TCTTTCCAGT	1680
AGCCCTCAAA	CTCATCCGCC	AAGTTGCCCA	AACAACAGAC	CTGCCTATCA	TTGGAATGGG	1740
AGGAGTGGAT	TCGGCTGAAG	CTGCCCTAGA	AATGTATCTG	GCTGGGGCAT	CTGCTATCGG	1800
AGTTGGAACA	GCTAACTTTA	CCAATCCTTA	TGCCTGCCCT	GACATCATCG	AAAATTTACC	1860
AAAAGTCATG	GATAAATACG	GTATTAGCAG	TCTGGAAGAA	CTCCGTCAGG	AAGTAAAAGA	1920
GTCTCTGAGG	TAAACTGCAA	TCAATCTGTT	CTTGATTTTT	TATTAGTTTG	TAATATGAAT	1980
TTAGGAGAAT	TTTGGTACAA	TAAAATAAAT	AAGAACAGAG	GAAGAAGGTT	AATGAAGAAA	2040
GTAAGATTTA	TTTTTTTAGC	TCTGCTATTT	TTCTTAGCTA	GTCCAGAGGG	TGCAATGGCT	2100
AGTGATGGTA	CTTGGCAAGG	AAAACAGTAT	CTGAAAGAAG	ATGGCAGTCA	AGCAGCAAAT	2160
GAGTGGGTTT	TTGATACTCA	TTATCAATCT	TGGTTCCTATA	TAAAAGCAGA	TGCTAACTAT	2220
GCTGAAAATG	AATGGCTAAA	GCAAGGTGAC	GACTATTTTT	ACCTCAAATC	TGGTGGCTAT	2280
ATGGCCAAAT	CAGAATGGGT	AGAAGACAAG	GGAGCCTTTT	ATTATCTTGA	CCAAGATGGA	2340
AAGATGAAAA	GAAATGCTTG	GGTAGGAACT	TCCTATGTTG	GTGCAACAGG	TGCCAAAGTA	2400
ATAGAAGACT	GGGTCTATGA	TTCTCAATAC	GATGCTTGGT	TTTATATCAA	AGCAGATGGA	2460
CAGCACGCAG	AGAAAGAATG	GCTCCAAATT	AAAGGGAAGG	ACTATTATTT	CAAATCCGGT	2520
GGTTATCTAC	TGACAAGTCA	GTGGATTAAT	CAAGCTTATG	TGAATGCTAG	TGGTGCCAAA	2580
GTACAGCAAG	GTTGGCTTTT	TGACAAACAA	TACCAATCTT	GGTTTTACAT	CAAAGAAAAT	2640
GGAAACTATG	CTGATAAAGA	ATGGATTTTC	GAGAATGGTC	ACTATTATTA	TCTAAAATCC	2700

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GGTGGyTACA	TGGCAGCCAA	TGAATGGATT	TGGGATAAGG	AATCTTGGTT	TTATCTCAAA	2760
TyTGATGGGA	AAATrGCTGA	AAAAGAATGG	GTCTACGATT	CTCATAGTCA	AGCTTGGTAC	2820
TACTTCAAAT	CCGGTGGTTA	CATGACAGCC	AATGAATGGA	TTTGGGATAA	GGAATCTTGG	2880
TTTTACCTCA	AATCTGATGG	GAAAATAGCT	GAAAAAGAAT	GGGTCTACGA	TTCTCATAGT	2940
CAAGCTTGGT	ACTACTTCAA	ATCTGGTGGC	TACATGGCGA	AAAATGAGAC	AGTAGATGGT	3000
TATCAGCTTG	GAAGCGATGG	TAAATGGCTT	GGAGGAAAAA	CTACAAATGA	AAATGCTGCT	3060
TACTATCAAG	TAGTGCCTGT	TACAGCCAAT	GTTTATGATT	CAGATGGTGA	AAAGCTTTCC	3120
TATATATCGC	AAGGTAGTGT	CGTATGGCTA	GATAAGGATA	GAAAAAGTGA	TGACAAGCGC	3180
TTGGCTATTA	CTATTTCTGG	TTTGTGAGGC	TATATGAAAA	CAGAAGATTT	ACAAGCGCTA	3240
GATGCTAGTA	AGGACTTTAT	CCCTTATTAT	GAGAGTGATG	GCCACCGTTT	TTATCACTAT	3300
GTGGCTCAGA	ATGCTAGTAT	CCCAGTAGCT	TCTCATCTTT	CTGATATGGA	AGTAGGCAAG	3360
AAATATTATT	CGGCAGATGG	CCTGCATTTT	GATGGTTTTA	AGCTTGAGAA	TCCCTTCCTT	3420
TTCAAAGATT	TAACAGAGGC	TACAAACTAC	AGTGCTGAAG	AATTGGATAA	GGTATTTAGT	3480
TTGCTAAACA	TTAACAATAG	CCTTTTGGAG	AACAAGGGCG	CTACTTTTAA	GGAAGCCGAA	3540
GAACATTACC	ATATCAATGC	TCTTTATCTC	CTTGCCCATTA	GTGCCCTAGA	AAGTAACTGG	3600
GGAAGAAGTA	AAATTGCCAA	AGATAAGAAT	AATTTCTTTG	GCATTACAGC	CTATGATACG	3660
ACCCCTTACC	TTTCTGCTAA	GACATTTGAT	GATGTGGATA	AGGGAATTTT	AGGTGCAACC	3720
AAGTGGATTA	AGGAAAATTA	TATCGATAGG	GGAAGAACTT	TCCTTGGAAG	CAAGGCTTCT	3780
GGTATGAATG	TGGAATATGC	TTCAGACCCT	TATTGGGGCG	AAAAAATTGC	TAGTGTGATG	3840
ATGAAAATCA	ATGAGAAGCT	AGGTGGCAAA	GATTAGTACT	ATAAGTGAAT	ATGATTTGAG	3900
TGAATAGTAA	GTAAAAATC	CTGATTTCAA	GTAAAAATCAG	GATTTTTTCA	TGGATGCAAT	3960
TTTTTTGGAG	TCTGGTGTGA	CGCGGAGGGT	CTTTTGTCTT	GTGTAAGTGA	CAAAGCCGGG	4020
TTTTCCACCA	GTTGGTTTAT	TGAGTTTTTT	GACTTCAATC	ATATCTACCT	GCACCAGATT	4080
CGACAGGCGC	CCTTGAGAGA	AGTAGGCAGC	TAACCTCTGCT	GCGTCTGTCT	TGACTGCATC	4140
AGATGGGTCA	AGATTTCCCTG	AGATGACAAC	ATGGCTTCCA	GGAATGTCCT	TAGCATGGAA	4200
CCAAAGTTCC	TCCTTGCGGG	CCATTTTAAA	GGTCAATTCC	TCATTTTGAA	GATTGTTTCG	4260
TCCGACATAG	ATGATGGTTT	TGCCATCGCT	TGCTAGATAT	TGTTCTAGTT	TTTTGCGTTT	4320
CTGGATTTTC	TCCCGTTGTC	TTCTGCGGAT	AAAACCTGTT	TGAATCAATT	CTTCACGGAT	4380
TTCAGCGATT	TCTTCCAGTC	CAGCTTGGTT	GAGGACGGTT	TCTACACTTT	CCAGATAGAG	4440
AATAGTGGCT	TTGGTTTCTT	CAATCAAATC	AGTCAAGTAT	TTGACAGCTT	CTTTGAGTTT	4500

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CTGATACCGT	TTAAAATAGC	GTTGGGCATT	CTGGTTGGGA	GTCAGAGCCT	TATCAAGCGC	4560
AATCATGATA	GGTTGGTTGG	TATAGTAGTT	GTCTAGGATA	ACCTGGTCTT	GGTCGTTAGG	4620
CACTTGGTGG	AGGAAGGTTG	TCAGCAATTC	TCCTTTTGA	CGAAATTCTT	CAGCGTTGTC	4680
TGTCGCCAGT	AACTCTTTTT	CCTGTTTTTT	GAGTTTGTGT	CGGTTTTTCT	GAAGTTCATT	4740
TTCAACACGA	CGAATCAGTT	CACTGGCCTG	CTGTTTGACG	CGGTCGCGCT	CAGCCTTATC	4800
CTTATAGTAG	GTGTCCAACA	AATCAGAAAG	ATTTGCAAAA	GGCTCTCCCA	CCTGATTTGC	4860
AAAAGGAACT	GGACTGAAGG	AAGTCTCAGT	CAAGCATGGC	TTGGTTTCTT	GATTGAAAAA	4920
ATTTTCGAAA	GCGGAAAGTT	TTTCACTAAC	CAGTATCCTT	TCCAATTCAT	TTGCCGTATC	4980
GCGTCCCAGA	CCTTGAAAGA	GGCTTTGAAG	ATTTTTTGCT	GTTAGTTCTT	GGGTTTGCAG	5040
GATTTCAAAG	AGCTTTTCAT	CCTTGATAGT	AAAAGGATTG	AGAGATTTTG	TACTTGGCGG	5100
AGCGATATAG	GTCGATCCTG	GAAGTAAGGT	GCGGTAGCTA	TTTTGTGAAA	AGCCGACGTG	5160
TTTGATAACT	TCGAGGATTT	TATGACTGCT	TTTATCGACC	AGTAGAATAT	TACTGTGTTT	5220
CCCCATAATT	TCGATAATCA	AGGTAGCCTG	GATATGGTCT	CCAATCTCGT	TTTTATTGGA	5280
AACTGTAATT	TCCACAATAC	GGTCATTTTC	CACTTGCTCA	ATCGACTCAA	TCAGGGCCCC	5340
CTGCAAATAC	TTTCTCAAAA	CCATGATAAA	GGTAGAAGGT	TGAGCTGGAT	TTTCAAAAGT	5400
CGTTTGGGTC	AGCTGAATGC	GTCCAAAAAC	TGGATGGGCA	GAAAGGAGCA	GGCGATGGCT	5460
TTGGCGATTG	CTGCGGATTT	GCAAGACCAA	CTCTTGTTCA	AAAGGCTGAT	TGATTTTCTG	5520
GATGCGACCA	TTCACTAATT	CGCTTCGCAA	TTCTCAACT	ATGTGGTGTA	AAAAAATCC	5580
GTCAAATGAC	ATCGTTCTCT	CCTTGTGATT	GTATTCCATA	GTATTATATC	AAAAAGGTAG	5640
AATAAAATCA	TGGAAATGTG	GTATAATAAA	GCCAAGTAAA	GAGAAACGAG	AAGCACATGT	5700
ATATTGAAAT	GGTAGATGAA	ACTGGTCAAG	TTTCAAAAGA	AATGTTGCAA	CAAACCCAAG	5760
AAATTTTGGA	ATTTGCAGCC	CAAAAATTAG	GAAAAGAAGA	CAAGGAGATG	GCAGTCACTT	5820
TTGTGACCAA	TGAGCGTAGT	CATGAACTTA	ATCTGGAGTA	CCGTAACACC	GACCGTCCGA	5880
CAGATGTCAT	CAGCCTTGAG	TATAAACCAG	AATTGGAAAT	TGCCTTTGAC	GAAGAGGATT	5940
TGCTTGAAAA	TTCAGAATTG	GCAGAGATGA	TGTCTGAGTT	TGATGCCTAT	ATTGGGGAAT	6000
TGTTCATCTC	TATCGATAAG	GCTCATGAGC	AGGCCGAAGA	ATATGGTCAC	AGCTTTGAGC	6060
GTGAGATGGG	CTTCTTGGA	GTACACGGCT	TTTTACATAT	TAACGGCTAT	GATCACTACA	6120
CTCCGGAAGA	AGAAGCGGAG	ATGTTTCGGTT	TACAAGAAGA	AATTTTGACA	GCCTATGGAC	6180
TCACAAGACA	ATAAACGAAA	ATGGAAAAAT	CGTGACTTGA	TATCCAGTTT	AGAATTTGCT	6240

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TTGACAGGTA	TTTTTACTGC	TATCAAGGAA	GAACGCAATA	TGCGAAAACA	CGCAGTGACG	6300
GCTCTAGTGG	TCATCCTTGC	AGGTTTTGTT	TTTCAGGTGT	CACGAATCGA	ATGGCTCTTT	6360
CTCCTATTGA	GTATTTTCTT	GGTAGTAGCC	TTTGAGATTA	TCAACTCTGC	TATTGAAAAT	6420
GTGGTGGATT	TGGCCAGTCA	CTATCACTTT	TCCATGCTGG	CTAAAAATGC	CAAGGATATG	6480
GCGGCCGCG	CGGTATTAGT	GGTTTCTCTT	TTCGCAGCCT	TAACAGGCGC	ATTGATTTTT	6540
CTCCACGAA	TCTGGGATTT	ATTATTTTAA	ACAGTAAGAG	GAAATTATGA	CTTTTAAATC	6600
AGGCTTTGTA	GCCATTTTAG	GACGTCCCAA	TGTTGGGAAG	TCAACCTTTT	TAAATCACGT	6660
TATGGGGCAA	AAGATTGCCA	TCATGAGTGA	CAAGGCGCAG	ACAACGCGCA	ATAAAATCAT	6720
GGGAATTTAC	ACGACTGATA	AGGAGCAAAT	TGTCTTTATC	GACACACCAG	GGATTCACAA	6780
GCCTAAAACA	GCTCTCGGAG	ATTTTCATGGT	TGAGTCTGCC	TACAGTACCC	TTGCGGAAGT	6840
GGACACTGTT	CTTTTCATGG	TGCCTGCTGA	TGAAGCGCGT	GGTAAGGGGG	ACGATATGAT	6900
TATCGAGCGT	CTCAAGGCTG	CCAAGGTTCC	TGTGATTTTG	GTGGTGAATA	AAATCGATAA	6960
GGTCCATCCA	GACCAGCTCT	TGTCTCAGAT	TGATGACTTC	CGTAATCAAA	TGGACTTTAA	7020
GGAAATTGTT	CCAATCTCAG	CCCTTCAGGG	AAATAACGTG	TCTCGTCTAG	TGGATATTTT	7080
GAGTGAAAAT	CTGGATGAAG	GTTTCCAATA	TTTCCCGTCT	GATCAAATCA	CAGACCATCC	7140
AGAACGTTTC	TTGGTTTCAG	AAATGGTTCG	CGAGAAAGTC	TTGCACCTAA	CTCGTGAAGA	7200
GATTCCGCAT	TCTGTAGCAG	TAGTTGTTGA	CTCTATGAAA	CGAGACGAAG	AGACAGACAA	7260
GGTTCACATC	CGTGCAACCA	TCATGGTCTGA	GCGCGATAGC	CAAAAAGGGA	TTATCATCGG	7320
TAAAGGTGGC	GCTATGCTTA	AGAAAATCGG	TAGCATGGCC	CGTCGTGATA	TCGAACTCAT	7380
GCTAGGAGAC	AAGGTCTTCC	TAGAAACCTG	GGTCAAGGTC	AAGAAAAACT	GGCGCGATAA	7440
AAAGCTAGAT	TTGGCTGACT	TTGGCTATAA	TGAAAGAGAA	TACTAAGTAG	AGGTAGGCTC	7500
ATGCCTGCTT	CTTGTTTTTA	CAGAAGGAGG	ACTTATGCCT	GAATTACCTG	AGGTTGAAAC	7560
CGTTTGTCGT	GGCTTAGAAA	AATTGATTAT	AGGAAAGAAG	ATTTTCGAGTA	TAGAAATTCG	7620
CTACCCCAAG	ATGATTAAGA	CGGATTTGGA	AGAGTTTCAA	AGGGAATTGC	CTAGTCAGAT	7680
TATCGAGTCA	ATGGGACGTC	GTGGAAAATA	TTTGCTTTTT	TATCTGACAG	ACAAGGTCTT	7740
GATTTCCCAT	TTGCGGATGG	AGGGCAAGTA	TTTTTACTAT	CCAGACCAAG	GACCTGAACG	7800
CAAGCATGCC	CATGTTTTCT	TTCATTTTGA	AGATGGTGGC	ACGCTTGTTT	ATGAGGATGT	7860
TCGCAAGTTT	GGAACCATGG	AACTCTTGGT	GCCTGACCTT	TTAGACGTCT	ACTTTATTTT	7920
TAAAAAATTA	GGTCCTGAAC	CAAGCGAACA	AGACTTTGAT	TTACAGGTCT	TTCAATCTGC	7980
CCTTGCCAAG	TCCAAAAAGC	CTATCAAATC	CCATCTCCTA	GACCAGACCT	TGGTAGCTGG	8040

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ACTTGGCAAT ATCTATGTGG ATGAGGTTCT CTGGCGAGCT CAGGTTTCATC CAGCTAGACC	8100
TTCCCAGACT TTGACAGCAG AAGAAGCGAC TGCCATTCAT GACCAGACCA TTGCTGTTTT	8160
GGGCCAGGCT GTTGAAAAAG GTGGCTCCAC CATTCGGACT TATACCAATG CCTTTGGGGA	8220
AGATGGAAGC ATGCAGGACT TTCATCAGGT CTATGATAAG ACTGGTCAAG AATGTGTACG	8280
CTGTGGTACC ATCATTGAGA AAATTCAACT AGGCGGACGT GGAACCCACT TTTGTCCAAA	8340
CTGTCAAAGG AGGGACTGAT GGGAAAAATC ATCGGAATCA CTGGGGGAAT TGCCTCTGGT	8400
AAGTCAACTG TGACAAATTT TCTAAGACAG CAAGGCTTTC AAGTAGTGGA TGCCGACGCA	8460
GTCGTCCACC AACTACAGAA ACCTGGTGGT CGTCTGTTTG AGGCTCTAGT ACAGCACTTT	8520
GGGCAAGAAA TCATTCTTGA AAACGGAGAA CTCAATCGCC CTCTCCTAGC TAGTCTCATC	8580
TTTTCAAATC CTGATGAACG AGAATGGTCT AAGCAAATTC AAGGGGAGAT TATCCGTGAG	8640
GAAGTGGCTA CTTTGAGAGA ACAGTTGGCT CAGACAGAAG AGATTTTCTT CATGGATATT	8700
CCCCTACTTT TTGAGCAGGA CTACAGCGAT TGGTTTGCTG AGACTTGTTT GGTCTATGTG	8760
GACCGAGATG CCCAAGTGGA ACGCTTAATG AAAAGGGACC AGTTGTCCAA AGATGAAGCT	8820
GAGTCTCGTC TGGCAGCCCA GTGGCCTTTA GAAAAAAGA AAGATTTGGC CAGCCAGGTT	8880
CTTGATAATA ATGGCAATCA GAACCAGCTT CTTAATCAAG TGCATATCCT TCTTGAGGGA	8940
GGTAGGCAAG ATGACAGAGA TTAAGTGGAA GGATAATCTG CGCATTCGCT GGTTCGGTAA	9000
TTTTCTGACA GGAGCCAGTA TTTCTTTGGT TGTACCTTTT ATGCCATCT TCGTGAAAAA	9060
TCTAGGTGTA GGGAGTCAGC AAGTCGCTTT TTATGCAGGC TTAGCAATTT CTGTCTCTGC	9120
TATTTCCGCG GCGCTCTTTT CTCCTATTTG GGGTATTCCT GCTGACAAAT ACGGCCGAAA	9180
ACCCATGATG ATTCGGGCAG GTCTTGCTAT GACTATCACT ATGGGAGGCT TGGCCTTTGT	9240
CCCAAATATC TATTGGTTAA TCTTTCTTCG TTTACTAAAC GGTGTATTTG CAGGTTTTGT	9300
TCCTAATGCA ACGGCACTGA TAGCCAGTCA GGTTCCAAAG GAGAAATCAG GCTCTGCCTT	9360
AGGTACTTTG TCTACAGGCG TAGTTGCAGG TACTCTAACT GGTCCCTTTA TTGGTGGCTT	9420
TATCGCAGAA TTATTTGGCA TTCGTACAGT TTTCTTACTG GTTGGTAGTT TTCTATTTTT	9480
AGCTGCTATT TTGACTATTT GCTTTATCAA GGAAGATTTT CAACCAGTAG CCAAGGAAAA	9540
GGCTATTCCA ACAAAGGAAT TATTTACCTC GGTTAAATAT CCCTATCTTT TGCTCAATCT	9600
CTTTTAAACC AGTTTTGTCA TCCAATTTTC AGCTCAATCG ATTGGCCCTA TTTTGGCTCT	9660
TTATGTACGC GACTTAGGGC AGACAGAGAA TCTTCTTTTT GTCTCTGGTT TGATTGTGTC	9720
CAGTATGGGC TTTTCCAGCA TGATGAGTGC AGGAGTCATG GGCAAGCTAG GTGACAAGGT	9780

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GGGCAATCAT	CGTCTCTTGG	TTGTCGCCCCA	GTTTTATTCA	GTCATCATCT	ATCTCCTCTG	9840
TGCCAATGCC	TCTAGCCCCC	TTCAACTAGG	ACTCTATCGT	TTCTCTTTG	GATTGGGAAC	9900
CGGTGCCTTG	ATTCCCGGGG	TTAATGCCCT	ACTCAGCAA	ATGACTCCCA	AAGCCGGCAT	9960
TTGAGGGTC	TTTGCCTTCA	ATCAGGTATT	CTTTTATCTG	GGAGGTGTTG	TTGGTCCCAT	10020
GGCAGGTTCT	GCAGTAGCAG	GTCAATTTGG	CTACCATGCT	GTCTTTTATG	CGACAAGCCT	10080
TTGTGTTGCC	TTTAGTTGTC	TCTTTAACCT	GATTCAATTT	CGAACATTAT	TAAAAGTAAA	10140
GGAAATCTAG	TGCGAGTAAA	AATCAATCTC	AAATGCTCCT	CTTGTGGCAG	TATCAATTAC	10200
CTAACCAGTA	AAAATTCAAA	AACCCATCCA	GACAgATTGA			10240

(2) INFORMATION FOR SEQ ID NO: 33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 33:

CGCTTTATCG	TGGACGTGGT	CAAGCCGAGA	ATTTTCATCAA	GGAGATGAAG	GAGGGATTTT	60
TTGGCGATAA	AACGGATAGT	TCAACCTTAA	TCAAAAACGA	AGTTCGTATG	ATGATGAGCT	120
GTATCGCCTA	CAATCTCTAT	CTTTTTCTCA	AACATCTAGC	TGGAGGTGAC	TTCCAAACTT	180
TAACAATCAA	ACGCTTCCGC	CATCTTTTTT	TTACGTGGT	GGGAAAATGT	GTTCGAACAG	240
GACGCAAGCA	GCTCCTCAAA	TTGTCTAGTC	TCTATGCCTA	TTCCGAATTG	TTTTTCAGCAC	300
TTTATTCTAG	GATTAGAAAA	GTCAACCTGA	ATCTTCCTGT	TCCTTATGAA	CCACCTAGAA	360
GAAAAGCGTC	GTTAATGATG	CATTAAAGAA	CAGTCGAGAT	GAAAAAATCG	TGTGACGCAC	420
CAAGGGAGGA	GTCTGCCCTT	TTGAGGAAAT	CTAGCGAGGA	AAAACGATAC	TGGAACAGCA	480
GAAAGTAAAA	CTGACCTCAT	GAGGAGGAAG	AAAGTGGCTC	ATGAGGTCAG	GGGTTTGTAA	540
AGTTACATCT	AGTTGAGAGA	GGTATGAATG	ATTTGGGATT	AATCATTTCT	TGTTTAAAT	600
CAGGAGAATA	GTAACGATTT	TTTCCTTTTT	TGACGAACTC	TATTCCGTAA	CGATCAATCA	660
ATTTAATCAT	GTACCTAATA	TTAGAAATGT	TTATCCCAA	TTTATTTGAA	AGCTTCTCTA	720
AGCTATATCC	TTGTTTCTA	AGTTCATAGA	TCTGAACTTT	ATCATCATAA	GTTAGTTTCA	780
TAATAAAAAC	ACCCCAAAAG	TTAGATTTTT	TCTGTCTAAC	TTTTGGGGGG	CAGTTCATTC	840
AACACCTGAT	ACTATGCGTT	TTTCTTATTT	GAAATACTTT	TTACTCAACC	TCTTTATACT	900
CAATGAAAAT	CAAAGTGCAA	ACTAGAAAGC	TAGCCTCAGG	CTGCTCAAAA	CAGTGTTTTG	960

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AGGTTGCAGA	TGGAAGCTGA	CGTGGTTTGA	AGAGATTTTC	GAAGAGTATT	ACTTAATCTT	1020
CTTGATACTT	TGACTAAGAA	TAAATCCTAC	AATCATCCCT	ACCATATTTT	GCATAAAATT	1080
CGGTAGAATT	TCTGGGAGGG	CTGCTGCCCC	GCCATTTCATC	AAAGCAGAAC	CCAAGGCGTA	1140
GCCTCCTACC	ATGGCAATAG	TTGCTAAAAT	AAGGCCTAAC	CACTGACTTT	TTCCTTTAAA	1200
TCCTGCGAAA	AATCCCTGCA	AGCCATGGTT	GACCAAGCTA	AAGAACATCC	ACTGAGGGTA	1260
GCCTGATAAG	AGGTCAATCA	AGAACTTGC	TAGTCCTCCG	ACTACCGCTC	CTTCACGACT	1320
ACCAAAGTAA	AAGGCCGCAA	AGAAGACACC	AGCATCTAAA	AGAGTTAGAA	TTCCTGTAGG	1380
TGTTGGGATT	TTTAAGAAAT	AACCTAGAAC	CACAGAAAGG	GCGGTTAATA	GGGATACAAG	1440
GGCGATTTTA	GTTGTTTTTG	TTTGCTTCAT	ATTGTCTTAC	TCCATACTGA	TCTGCTTGTG	1500
CAATAGCACG	ATAAACGAAA	GCCTTAGAGC	TTTCTACTGC	TGGCAAAAGT	TTATCACCTT	1560
TAACCAGGTG	ACTGGCAATG	CTAGAGsCAA	AGGTACAACs	TGCACCAGCA	TTTTGGCCTT	1620
GGATAACTGG	ATTTTCTAGG	ATAGTAAAGG	TCTGTCCATC	ATAAAAGACA	TCCACAGCCT	1680
TGTCCTGACT	AAGACGATTG	CCTCCCTTGA	TAATGACTGt	GGCGCTCCTA	AATCATGCAA	1740
TTTCTGCGCT	GCAGTTTTCA	TGTCTTCCAA	GGTTTTAATT	TCCTGACCGG	ATAATAATTC	1800
TGCTTCTGGG	AGATTAGGCG	TAATCACACT	GACATAAGGG	AAAAAGCGAA	TCAACTCTTG	1860
GCAGAGCTCA	CTGACAGCTA	CATCATGCGT	TTCTTGCAG	ACCAAGACAG	GATCCAACAC	1920
CACAGGTACT	CCTGGGCGTT	GTTTGATAAA	GTCCAAGGCC	TTCTCAGCCA	CGCTGACAGT	1980
AGGGAGAAGA	CCAATCTTAA	TTCCCCCAA	TTCCACATCA	CGCAAGCTAT	CTAATTCATG	2040
TTGAAAAATG	GTATCATCAG	TTGGAAAGAC	TTCAAATCCT	TTTTCTGTCA	AGGCTGTCAA	2100
ACAAGTCACT	GCTACAAACC	CATGCAAGCC	GTTCAAGGTA	TAGGTAGCCA	AATCAGCTGA	2160
CAGTCCACCA	CCACTAAAAA	TATCATTTCC	AGAAAGTGCT	AAAATACGAT	TATTCTTCAT	2220
AACGAATCTC	CTTTAAATAC	AAACCATTTG	GTGCTGCAGT	GGGACCTGCA	AGTTGCCTGT	2280
CCTTCTTCTC	CAAGATGAGA	TCAATCTGCT	CTACTGGCAT	GCGGTTGTTA	CCGATTTTGA	2340
GAAGAGTCCC	CACCATATTG	CGAATCTGTT	TATACAAGAA	ACCATTTCCCT	GAAAAGGTAA	2400
AGGTCAAAAA	TTGTCCTGTC	TCATCGACTA	TTAAACTAGC	TTCTGTGATG	GTGCGAACCT	2460
TATCCTCTAC	ACTAGTCCCA	GAGGCTGTAA	AACCGGTAAA	ATCATGGGTT	CCCTCTAGCT	2520
TTTTGATTGC	AATCTGCATT	CGTTCCACAT	CGAGTGGGTA	GGGAAAGTGG	GTGGCATAGT	2580
GACGGCGCAT	CGGATTTTTG	GGACGTCCTC	TATCCACAGT	AAACTCATAG	GTCTTGCTAT	2640
GCTTGGCATA	ACGGCAATGA	AAATCATCTG	CCACAAGCTC	AATCGAAATC	ACATCAATAT	2700

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CTTCAGGAGA	CTGGGTATCC	AAGGCAAAAC	GGAGTTTCTC	CTCATCCATC	TGATAAGGCA	2760
GGTCAAAATG	AATCACCTGT	CCCAGGGCAT	GAACCCCACT	ATCTGTCCTA	CCAGCACCGT	2820
GAACAGTAAT	GGCTTGCCCT	TTATTTAATC	TGGTCAAGGT	TTTTTCAATT	TCTTCCTGAA	2880
CGCTACGCGC	ATGAGGCTGG	CGCTGAAAGC	CAGCAAAGGC	ATAACCATCA	TAGGAAATAG	2940
TTGCTTTATA	TCTCGTCATA	GCCTCTATTT	TATCAAGAAA	TTAGTCTGTA	AACAAGGACC	3000
TAAAACAAAT	ATTGTATGGG	TATAAAAATC	TCATACTCTT	CGAAAATCTC	TTCAAACCAC	3060
GTCAGTTTCC	ATCTGCAACC	TCAACACACT	ATTTTGAGCA	ACCTGCGGCT	AGCTTTCTAT	3120
AGTAGATTGA	AATAAGATAT	GAACAACCTCT	ATTAGGAAAG	TCAAATTAAT	TTCTAGAAAT	3180
ATTTTAGCAG	CTACAGCGTA	CTATTCCAAA	CTCAATCAAC	TATAGTTTGC	TCTTTGATTT	3240
TCATTGAGTA	TCAAAAGAAA	AACTTAGGAA	TCAATCCTAA	GCTCTCTTCT	GAAGTAGGTA	3300
CATGACAAAG	ATAGAGATTA	CAATCAACCA	ACCTCCTAAG	ATACTAAAGA	CCAACATCCC	3360
ATTGTGAGTT	AGTAAGCCAA	TTGCACCTAG	AACGAATGGG	GTCGTAAAGG	CTCCGAAACT	3420
ACAGCCTAAT	ACAGCAAATG	AAGTTGCTTG	ATTGAGGAGT	TTAGCTGGAA	TTCGTTCAGA	3480
GACAAGTTGA	AAGACCGTCG	TCAAGACTAC	ACTATAGGCA	AATCCAGCCA	GAACACTTCC	3540
TGCTACTACC	ACCCACAAGG	ATGAAGACAA	GGCAATCACG	ATTTGCCCCA	AGCCAAAGGT	3600
AATACCAGAC	CAGAGGAGCA	GTTTCTCTTT	AAAGATAGAA	ATCAAGAAAG	AAAAACTCAC	3660
CCCAGCCACA	ATCCCGATCA	ACTGCATGAT	ACTAAGAACA	AAACTAGATA	ACTGGGCATC	3720
CCCCAATCCT	CTTTCCACCA	TCAAACCTGG	AATACGGATG	GTAATAGCTG	TATTGGTACA	3780
AACTACAAC	GCCGCTTCGA	TAGCTAAGGT	AAAAATCAAG	CCTTTCATTT	CTCGAGTTAA	3840
ACGACTTGCT	TCCTTCGCTC	TTTTCTTGAC	TTCTTTCTTT	GATTTTCCAT	AAGGGACAAA	3900
GAGCAGATAA	AGGGGCAGCA	CCAAAAATCC	AGCACTATAG	GCTAGAAAGA	TAGCTGTCCA	3960
ACCAAAGGCC	AACAACGAC	CGACGGCCAA	GGTAATGAGA	GAAGCTCCAA	CGACCTCTGC	4020
AGAAGCGCGT	AGCCCTAACA	TCTGAATTCG	CCTTTTTCCT	TGGTAGCGTT	CACTGATAAT	4080
AGAAATGGCC	TTGGCATTGA	TCATCCCAAG	ACCCAAACCA	AAGAGAAGCC	GTGTTCCAAA	4140
GACAAAGGGA	TAGGCTTGGT	ACCAGAAGGG	AGCTGTACCG	CTCAATGATA	AAATCAGCAA	4200
GCCCCAACTA	ATCTGTAAGC	GCTCAGGAAA	TATTTTTTCT	AAGAAACCAT	TTAGCAGTAA	4260
CATCATCATG	ATTCCAAAGG	AAGGCAAGCT	CACCAAGAGC	TCAATTTGTT	CCTTAGAATA	4320
ACCCTGATAA	TAGTCAAACA	TGGCTGGTAG	GGCACTCGAA	ATGGAAAAGG	AGGTAATCAA	4380
AACGAGGGAG	AGAGCCAAAA	TGCTGGCCCC	TTCTAAAAAT	TGTTTCATGA	AATCTCTTTC	4440
TATATTTCTC	TTAATCTTCT	ACTTTTTTGA	TAGTTATCAA	ATAAGCAAGA	AAAGAAGAAG	4500

CCTCATTGGT	TTGTAGACTC	CTTCTTAAAT	TCGAAAATGA	ATCCCTTGTA	TCTTATACTC	4560
AATGAAAATC	AAAGAGCAAA	CTAGGAAGCT	AGCCGCAGGT	TGTTCAAAAC	AGTGTTTTGA	4620
GGTTGCAGAT	GGAAACTGAC	GTGGTTTGAA	GAGATTTTCG	AAGAGTATTA	GGATGACTTT	4680
CTCTTGATTT	GCTTGATAAA	GTAGAAAATA	AATCCTGCTA	CCATATAGGC	AACAAAGATA	4740
ATCAGACACC	ACTTAAACAC	AACATTCCAA	CCCTTGTTCA	CATTCAAAAA	GAAGTAAGGG	4800
AAAGGATTAT	CCTTGGCATT	TGGAATATTG	AGTTTTAGAA	CCAAGCCATT	AAAAAGAGCA	4860
AACATCATAT	ACAGAAAGGG	TAAAATGGTC	CACACTGCTG	GATCCCAAAT	CTTGTATTGA	4920
CCCTGTTTGT	CAAAAAAGAG	GGTATCCGCT	AAAAACCAGA	TGGGAACGAT	ATAGTGGCAA	4980
AGGAAATTTT	CTAGGGTATA	GAAATTAGTC	GCAATGGGCG	CCAAGAGGAA	ATGGTAAATC	5040
ACACAGGTAA	TCATGATACT	CATGGTGACC	CCACCTTTTA	AGCGCAAGAG	ACTTGGCCTT	5100
TGCCAATTTT	CACCTACACG	GCTCATAACC	TTTAGAAGAT	AAAGGGTAAA	AATAGTTACC	5160
AAGAGGTGG	ACAGAACCGT	GTAATAGAGA	AGCATCCCAA	AACCACCATG	CTTAGTAATT	5220
TCAAGATAAA	CTCCCGTAAA	AGCCGCTAGA	AACAAGAAGA	TACGGCTATA	AAATACAAGT	5280
TTATAGTGTT	TTGACATGCT	TAAATCTTCC	TCACAAACTC	TGATTTAAGT	TTCATGGCAC	5340
CAAAACCATC	AATCTTACAG	TCGATATTGT	GGTCGCCTTC	TACGATGCGG	ATATTTTTC	5400
CGCGCGTCCC	TTGTTTCAAA	TCTTTTGGCG	CACCTTTTAC	TTTCAAGTCC	TTGATGAGAG	5460
TTACTGTATC	ACCATCAGCC	AATTTATTTT	CGTTGGCATC	GATAGCGACA	AGACCTTCTT	5520
CTACTTCTGC	AACTTCAGCA	GGATTCCACT	CATGAGCACA	CTCTGGGCAA	ACCAGTAGGG	5580
CACCGTCTTC	GTAGACATAC	TCTGAGTTAC	ATTTTGGACA	ATTTGGTAAA	TTGTTTCATGG	5640
TTTCTCCTTA	TCATCATTTA	CTATTCTTTG	AAAATCAAAA	TTTCTCGAAC	AGCAACTATT	5700
ATACCCTAAA	ATCAGCATTT	TGACAAATTT	AGAAAAAAC	CGATATCAAT	CTATCGGCTT	5760
TTCTACATTT	ACATTCTTTT	TTCAGCTTCT	GCTTTGATTT	TTTCAACTAC	TTCTTGAATG	5820
TTCAAACCAG	TTGTATCAAG	GTAGACAGCA	TCCTCTGCTT	GTTTGAGAGG	AGAAGTCTCA	5880
CGATGACTAT	CCTTGTAGTC	ACGCGCAGCA	ATTTCCTTTT	TTAGGGTTTC	AAGGTCTGTT	5940
TCAATTCCCT	TGGCAATATT	TTCTTGTA	CGACGCTCTG	CTCTCTCATC	AACAGAAGCT	6000
ACTAGGAAAA	TTTTCAATTC	TGCTTGTTGGC	AATACAACAG	TTCCAATATC	GCGACCATCC	6060
ATGACAATCC	CGCCTTGCTG	GGCAATTTCT	TGTTGGAGAG	AAACCAGTTT	CTCACGCACT	6120
TGAGGAATTG	CTGCAATAGC	AGAAACATGA	TTGGTCACTT	CATTTTCACG	GATAGGATGG	6180
GTAAATATCCA	CATCTCCTAC	AAAAACAAGC	TGGTCTCCAG	TTTCTGAACG	TCCAAAGCTG	6240

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ATTGGATGCT	GGTCCAACAA	GGCTAGAAGG	GCTTCGACTT	CTTCAACTCC	TAATTGGTTC	6300
TTAAGAGCCA	TATAGGTCGC	TGCACGATAC	ATAGCTCCTG	TATCAAGGTA	GGTGAATCCA	6360
AAATCCTTAG	CAATAATCTT	TGCGACCGTA	CTCTTACCGC	TGGAAGCAGG	ACCATCAATA	6420
GCAATTTGAA	TTGTTTTTCAT	ATCGGCTCCT	ATTTTATTTT	TATAACATCA	CCTGGATTAG	6480
CAAACCAAGA	TCCTGTAGCC	ATGTGCCCAG	GATTCAAGGC	CTCTAACTGA	GCAATGGAGA	6540
TTCTTGCACG	AGCGGCAATA	GCTGCTTCCC	CTTCTCCTGC	GAGAACTTTA	ATCGTTCCTT	6600
CAGGATTAGC	AGCTTCTTCT	GAAGTACTAG	AAGTAGATTC	TGGCTCTGAA	CTCTGCTCAG	6660
GCTGAGAACT	ACTTGAAGAT	GAGATTTGTA	CTACACTGGC	ATCAGAATCA	TGAAAGCCTT	6720
TTAAGGCTGC	TGTGCGATTA	CTCCCCCCCC	ATGATAGATA	GATGAGAACG	ATGACCATCA	6780
CCACCACAAT	TACAAAGAAA	ATACTAGCTA	GGATCGTCAA	AATACGATTA	GCCATCCTAT	6840
CAGCCCCTCC	GTGGTTTCGA	TGCCGACGCT	CTGCTCTTGA	TTCTTCTTGA	TCATAGATAT	6900
CTTCTTGCCA	CGGTTCTTTT	GCCATACCTT	ACTCCTTGTT	TTTTTTTACT	TTTCTTATTA	6960
CAATATAAAT	ATGAACATGA	AAATCACACT	TATACCTGAA	CGATGTATCG	CCTGTGGGCT	7020
TTGCCAAACT	TATTCTGATT	TATTTGATTA	CCACGATAAT	GGAATCGTGC	GTTTTTACGA	7080
TGACCCTGAC	CAACTGGAAA	AAGAAATTTT	TCCTAGTCAG	GATATCTTAG	AGGCTGTTAA	7140
AAATTGCCCA	ACTCGCGCCC	TGATTGGAAA	CCAGGAAGCC	TAAATCAATG	GCGATAATCC	7200
ACTCCCTCTA	GTTTAGCACA	TTTCCATGTA	AAATTATAGT	CTTTTCACTT	TATTTTTTTT	7260
TGTAAAATCA	GGAAGGTCAC	TTTTTTCTTT	GATAAGATAA	AGTGGTCTTT	TTTTTAGTCT	7320
TAAATAAATC	TACTGATAT	ACTTGCCGAG	AATCCCAATG	GTCAAGAGTT	GAATGCCTCC	7380
AAGAAAGAGA	ATAACAGCCA	TCAGAGAGGT	CCAACCAGAT	GTCGGATTGC	CCAAAATGAG	7440
GGTCCGAACC	ACAACAAAAA	AGGTCATCAG	CAGAGAAAGA	AAACAAGATA	GGAGACCAGC	7500
TACAAAGGCT	ATAATCAAGG	GAAAATCTGA	AAAATTAATA	ATCCCTTCAA	TGGAGTAGAA	7560
AAAGAGTTGC	CTAAACTCC	AACCTGTCTT	GCCAGCCTGC	CTTTTCGACAT	TTGGATAGTC	7620
CAAATAGTAG	GTTTTGAAAC	CCACCCAGGC	GAAGAGCCCC	TTTGAAAAAC	GATTGGACTC	7680
GGTCAAGCTT	AAAATGGCAT	CGACTACAGA	CCTTCTCATC	ATACGAAAAT	CACGGACACC	7740
CGACGGCAGA	GCTACTGGGC	TGATTTTTTG	CATGAGGCGA	TAAAAGAGAA	CAGCACAGAA	7800
ACTGCGAAAG	AAGGGTTCTC	CCTCCCGACT	AGTTCTCCGT	GTCCCAACGC	AGTCCAAGTC	7860
TACATTTTTG	TCTAATACAT	TTTTCATCTC	AAACAACATA	CTAGGAGGAT	CTTGGAGGTC	7920
TGCATCCATC	ACCACCACCA	AATCTCCTGT	CGCATATTGC	AAGCCTGCAT	AAAGGGCTGC	7980
TTCTTTGCCA	AAATTTTCGAG	AGAAAGAAAT	ATAATGGACT	GCCGGATTTT	GCTCCCGATA	8040

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GGCCTTTAAG	AGTTCCAAGG	TCCCATCACT	TGATCCATCA	TCGACAAAGA	CATACTCGAT	8100
TTCTGTTTCC	AAATCTGGAA	GTAAAGCTTC	CAGAGCCTGA	TAAAAAAGAG	GAAGTACTTC	8160
CTCTTCGTTT	AAACAAGGGA	CGATGATTGA	AATCATCATC	TTAGTCTTCA	AATCCATTTG	8220
GATGCTTGCT	TTGCCAACGC	CATGCGTCTT	CACACATTTG	GGTGATGTCG	AGTTCTGCTT	8280
CCCAACCGAG	TTCTGCTTTA	GCTTTTGCCG	GGTCTGAGTA	GCAGGCAGCG	ATATCACCTG	8340
GGCGACGTTT	TACGATGCGG	TAAGGAATAG	GACGGCCAC	CGCTTTTTC	ATGTTTGGGA	8400
TAATTTCAAG	AACTGAGTAA	CCTTTACCAG	TTCCAAGGTT	ATAAACGTTT	AGTCCTGAAC	8460
CTTTTTGGAT	TTTTTTCAAA	GCTGCAACGT	GACCCTTAGC	CAAATCGACA	ACGTGGATAT	8520
AGTCACGAAC	ACCTGTTCCA	TCTTCCGTAT	CGTAATCGTC	TCCAAACACT	TGCACTTGCT	8580
CTAATTTTCC	AACGGCTACT	TGAGTCACAT	ATGGCAAGAG	ATTGTTTGGGA	ATACCGTTTG	8640
GATTTTCTCC	CAAATCACCA	CTCTCATGGG	CTCCGATTGG	GTAAAGTAA	CGAAGCAAGA	8700
CAACATTCCA	TTCTGAGTCT	GCTTTGTAAA	TATCAGTCAA	AATTTCTCT	AGCATGAGCT	8760
TAGTACGACC	GTATGGGTTG	GTCAGTAAA	GTGGGAAATC	TTCCAAGATG	GGCACTGTGT	8820
GCGGATCCCC	GTAAACTGTC	GCAGAAGAAC	TGAAGATGAT	GTTTTTACAG	TTGTTTTCTT	8880
CCATGGCTTT	CAAAGGCTG	ACAGTTCCAG	CGATATTGTT	GTCATAGTAG	GCAAGAGGGA	8940
TACGTGTTGA	TTCGCCAACA	GCCTTCAAAC	CAGCAAAGTG	AATGACACCA	GTCGGTTCTT	9000
CCTGCTTGAA	AATATCTCTG	AGGGTATCTG	TGTCACGAAT	ATCTGCCTCA	TAGAAAGGAA	9060
TCTCAACTCC	TGTGATTCCT	TCAACAACCT	CTAAACTCTT	ACGATTGCTA	TTGACAAGAT	9120
TATCCACCAC	AACAACCTGA	TGACCTGCTT	GGATCAATTC	AATAACAGTG	TGGGTTCCAA	9180
TAAAACCGGC	ACCACCAGTT	ACCAAAATCT	TTTCTTGCAT	CTTTTTTCCT	CGATTCTCAG	9240
ATTATTTTTT	CTTATTTTAC	CATTTTGGAC	AGGGAATGTC	ATTTGCCATC	CTAAACTACC	9300
TGATAAAATT	TCAGTAAAAT	GCTTATACTC	TTGAAAATC	CAATTCAAAC	TACGTCAACG	9360
TCGCCTTGCC	ATGGGTATGG	TTACTGACTT	CGTCAGTTCT	ATCCACAACC	TCAAAACAGT	9420
GTTTTGAGCT	GACTTCGTCA	GTTCTATCCA	CAACCTCAAA	GCAGTGCTTT	GAGTAACCCG	9480
CGGCTAGTTT	CCTAGTTTGT	TCTTTGATTT	TTATTGAGTA	TTATTCGCTT	TTACTCGTT	9540
TGACATAGTT	TTCAATTGGG	TAATTTAGAG	GGTCCAAGGT	CAACTCCTTG	TCTTGATCA	9600
GTTGGGCTAG	ATGGTAACCA	ATGATAGGAC	CAGTTGTGAG	GCCTGATGAA	CCTAGTCCAC	9660
TGGCTGCATA	GACACCAGTT	AAGTCAGGCA	CCTGCCCAAA	GAAAGGAGAG	AAATCACTGG	9720
TGTAGGCACG	GATTCCAACA	CGCTCAGATT	TTGAAGTAGC	TTAGCCAAA	ATCAGATAGT	9780

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GAGTCAAGGT	GGCCTCCTCC	ATTTGTTGGA	GCAAGGTTTC	ATCTACCGTC	AAATCAAATC	9840
CCATGTCATT	TTCGTGGGTA	GCGCCTAAGG	ATAATTTCCC	ACCTGCAAAG	GGAATCAAAT	9900
CCCCTCCCC	TTCTGGCATG	ACAACAGGGT	AATCTTCCAT	GTCTTGGGCA	AGCTGATAAT	9960
CTCGTAGTTG	TCCTTTTTGA	GGACGGACAT	CCACTTCATA	ACCTAAAGGC	TCTAACATGT	10020
CCCCCAACCA	AGCTCCCGTC	GCCAAAATAA	CCTGCTCAAA	CTCCTCTTCA	CCAATCTGGT	10080
AGCCTGATGC	TAACGGTGTC	AGAGTCACTT	TTTCTTTGAC	CAGCTTGACA	TGACTGACTT	10140
CCAGCAAACG	AGTCACTAAA	AGTTGGCCAT	CTACTCTCGC	TCCACCAGAA	GCATAGAGCA	10200
GGCGGTCAAA	TCCCTGCAAA	CCAGGGAATA	ATTCATTAGC	TGAGGCTTGG	TTCAGAATGG	10260
CTAATTGCCC	TATCAAGGGA	GATTCTTCTC	TGCGCTGGAG	GGCCAGTTGA	TAAAGTTCTT	10320
CCAAATTGGA	TTCATCCTTT	TTCAAGAGAA	AGACTCCCGA	ACGCTGGTAA	AAGTCGATTT	10380
CTTGTCCTGA	TTTCTCTAAA	TCAGCTAATA	AATCCACATA	AAAATCAGCC	CCCAAGCGCG	10440
CCATCTTGTA	CCAGGCTTTA	TTACGGCGTT	TGGAAAACCA	AGGACTGATA	ATTCCTGCTG	10500
CGGCCTTGGT	GGCTTGACCT	TGCTCATGGT	CAAAAACGGT	CACCTCTAGG	TCACTTTCTC	10560
TCGAGAGGTA	GTAGGCAGCT	GTTGCTCCCA	CAATTCCTGC	TCCAATAATG	GCAACTTTTTT	10620
TCATTGTCTT	CACTTTCTAA	CTAGATATGA	TGGAAAGGAT	TGGTTGATGC	CTGACTAGGC	10680
AAGATATCAA	TAGACCACCC	CTTATCTTCC	TTCCATTGAC	TAAGAAGTGC	TGCGATTTTTT	10740
TCTACAAAAA	TCACTTCGAT	ATAGTGACCT	GGGTCCAATG	CAAGCAACCC	ATCAGATAGC	10800
ATATCCTGAG	CAGTATGGTA	GTAGATATCA	CCAGTGATAT	AGACATCTGC	CCCCTTTGCC	10860
AAAGCATCCT	TATAGAAAGA	CTGCCCCTTT	CCACCACAAA	TTGCTACTCT	TGAAATAGGC	10920
TTCTGCAAAT	CATCCTCTTG	ATAATGCACC	ATTCGAAGGC	TATCTAGGTC	AAAGACTTGC	10980
TTGACCTGTT	GGGCCAATTC	CCAAAATGTC	TGAGGCTGAA	TATTCCCAAT	ACGTCCAATT	11040
CCACGTTCTG	GACCTGTTTC	CTGCAGATAA	GTCGTCTCCT	CGATTCTTAG	CATCTGACAA	11100
AACCAGTCAT	TGAGCCCATT	TTCAACGATA	TCAATATTGG	TATGGCTGAC	ATAAACTGCG	11160
ATATCATGCT	TAATCAGGTC	GATGTAAATC	TGATTTTGCG	GACGGCTGGC	AAGCAAGTCC	11220
TTGATAGGAC	GAAAGATAGG	CGCGTGCTTG	ACGATAATCA	AGTCCACACC	CTTTTCAATG	11280
GCCTCTGCCA	CTGTCTCTTC	ACGAATATCG	AGGGCAACCA	TGACCCTTTG	GATACCCTTG	11340
TCTAAAGTGC	CAATTTGCAG	ACCACGGCTG	TCTCCCTCCA	TAGAAAATTC	CTGAGGGCAA	11400
AAGGCTTCAT	AAGCTTGGAT	CACTTCACTT	GCTAACATGG	AGCACCTCCT	TGATAGCTTG	11460
AATCTTATCT	ACTAGAACTT	GACGTTCTTC	CAGATTTTTT	TCTGGGATTT	GTCCGAGGGC	11520
GAACTCTAGC	TTCTCAGCTT	CTTTTTGCCA	TTTTTGGACA	AATACTGGAC	TGACTTCTTT	11580

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GGACAAGAAG	GGACCAAAGC	GAACATCACT	GGCTGATAGC	TTCATTTGTC	CTGCTTCCAC	11640
CACCAAAATC	TCATAAAACT	TTCCAGCTTC	TTCTAAGATG	CTTTCTGCTA	CAATCTGGAA	11700
TCCATGATCC	TGTAGCCAGA	TACGCAAGTC	GTCTTCACGA	TTATTGGGCT	GGAGGATCAA	11760
ACGCTCTACA	TTAGCTAACT	TCCCCAAACC	TTCTTCTAAA	ATCCTAGCAA	TCAAACGACC	11820
ACCCATGCCA	GCAATGGTAA	TGACAGACAC	TTGGTCAGTC	TCTTCAAAAG	CTGCCAAGCC	11880
ATTGGCTAAA	CGGACTTGGA	TTTTCTCCTT	TAGGCCGTGA	GCCTCAACAT	TTTAAACCGC	11940
AGACTGATAG	GGACCTTCCA	CCACCTCACC	TGCAATAGCG	CTTTTGATTT	GGCCTCTCTC	12000
AACCAACTCG	ATAGGCAGAT	AAGCATGGTC	ACTTCCCACA	TCTAGTAAAA	TAGCCCCCTG	12060
TGACACAAAG	GAAGCTACCA	ATTCTAATCT	CTTTGAAATC	ATCTTCTCTC	ACTTTCCAAA	12120
ACTCTATTAC	CTCTTATTAT	ACCACATTTT	AATCTTCAAC	TTCCCAGTAA	TATAAGCACC	12180
TCTGGCGAAA	GAAGTTTCAA	TGTCCTAAAG	TAATAAGTGA	ATCCAATTGA	AAGATTTTAA	12240
ACAATTTGCA	AAAATGTCAA	AAAATAAAAA	ATAAACAGTT	TATTCAGAAA	ATTCTTGACA	12300
TATAAAAACA	CATGGTAGAA	TATAATTAGA	AAGTTAGAAA	AAATAAAAAGT	TTGACTAAAA	12360
TTTGTATTTG	AAGGTGGTGT	TCAGATAAGA	AATTTAGTCA	GACGAACCAC	GAATTTGCTC	12420
TATGCTTTCT	GGAATTTATC	ATAACAGGAG	GATACAGTCA	TGGAACAAAC	ATTGTTTGAA	12480
TTAGAACTAC	TTCCAGAGGA	AGATATCATT	GTCACAGGTC	TCCCTAAGTA	TTGTTCTTTT	12540
ACTTGTTTAA	TTACAGGTCG	CTAGTTATAT	TTTATATAAA	ATAAGTAGCT	TTACTTACGG	12600
AATAGGCTAG	TGCTGTGTCT	CTAGCCTATT	TTAATAATTA	GGAGTTTGTT	ATGGATTTAT	12660
TAGAGAAAGA	ATGTTTAAAA	TGTGATAAAA	ATTTCCAACA	GGGTGATATT	TGGAATTACT	12720
ATTATTTATC	AGATAAGATG	CCTGCACAAG	GGTGGAATAA	ACACATAAGC	TCCCAAATAA	12780
AAGACGCTGT	AAATATTTTT	AAGATTGTGT	ATAAACTATC	CCAACATAAT	AATTGTAGCT	12840
TTAAAGTTGT	TAAAAATTTA	GAGGAATTAA	AAAAAATTAA	TTCCCCTAGG	GAAATGAGCC	12900
CTACTGCTAA	CAAATTTATA	ACTCTATATC	CTAAGTCAGA	ATCTGAAGCT	AAGAGTATGA	12960
TTTGTAATCT	TACGAATAGA	CTGTCAGAAT	TTAAGGCTCC	AAAAATACTA	TCTGACTATC	13020
AATGTGGAAT	GCATTCTCCA	GTTCAATTATA	GATATGGGGC	TTTTTTAAAA	AAACAAGCTT	13080
ATGATGAAAA	AAATAAAAAA	GTCATCTATT	TATTGCTAGA	TGAAAAAAGG	AAGAACTATG	13140
TAGAAGATAA	GAGACAAAAT	TTCCCTAGTC	TTCCCTAGCTG	GAAAATGGAT	TTATTTTCAG	13200
AAGAAG						13206

(2) INFORMATION FOR SEQ ID NO: 34:

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- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 13104 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

CCGGATCCAG CGAAAAATAT GCTCTTTGAT GCTGTAAGTG GTCAAAAAGA TGCTAAAACA	60
GCTGCTAACG ATGCTGTAAC ATTGATCAAA GAAACAATCA AACAAAAATT TGGTGAATAA	120
AAAATTTGTT CAAGGGGGGT GGAAATCAAA TCCCCCTTTG AATTTATCAA TAGAGACACA	180
AATAATTTAG CTTTCTTATA AAAAAGTAGT ATCCTATGAA AGGAGTTAAT ATGGAAAAGC	240
AACAACCTAG TAAAGCAGCC CTGCTGTCTA TCATTCCTGG GTTAGGACAG ATTTACAATA	300
AACAAAAAGC CAAAGGTTTT ATCTTCCTTG GTGTAACCAT CGTATTTGTC CTTTACTTCC	360
TAGCACTTGC AACCCCTGAA TTGAGCAACC TCATCACTCT TGGTGACAAA CCAGGTCGTG	420
ATAATTCCCT CTTTATGCTG ATTCGTGGTG CCTTCCATCT AATCTTTGTA ATCGTTTATG	480
TACTCTTTTA TTTCTCAAAT ATCAAAGATG CACATACGAT TGCAAAACGC ATTAACAATG	540
GAATTCCAGT TCCACGCACA CTCAAAGACA TGATCAAAGG GATTTATGAA AATGGCTTCC	600
CTTACCTCTT GATCATTTCA TCTTATGTTG CCATGACCTT CGCGATTATC TTCCCAGTTA	660
TCGTAACCTT GATGATCGCC TTTACCAACT ACGACTTCCA ACACTTGCCA CCAAACAAGT	720
TGTTGGACTG GGTGTTTGTG ACCAACTTTA CAAACATTTG GAGCTTGAGT ACCTTCCGTT	780
CTGCCTTTGG TTCTGTTCTT TCTTGACTA TCATTTGGGC TTTGGCAGCT TCTACTTTAC	840
AAATCGTAAT TGGTATCTTC ACAGCTATCA TTGCCAACCA ACCATTTATC AAAGGAAAAC	900
GTATCTTTGG TGTATTTTTC CTTCTTCCTT GGGCTGTCCC AGCCTTCATC ACTATCTTGA	960
CATTCTCAAA CATGTTTAAC GATAGTGTCG GTGCTATCAA CACTCAAGTA TTGCCAATCT	1020
TGGCTAAATT CCTTCCTTTC CTTGATGGAG CTCTTATTC TTTGGAAAACA GACCCAACIT	1080
GGACTAAGAT TGCCTTGATT ATGATGCAAG GTTGGCTCGG ATTCCCATAC ATCTACGTTT	1140
TGACCTTGGG TATCTTGCAA TCTATTCCTA ACGACCTTTA CGAAGCAGCT TATATTGACG	1200
GTGCCAACGC TTGGCAAAAA TTCCGCAACA TCACTTTCCC AATGATTTTG GCTGTTGCGG	1260
CACCTACTTT GATTAGCCAA TACACCTTCA ACTTTAACAA CTTCTCTATC ATGTACCTCT	1320
TCAATGGTGG AGGACCTGGT AGTGTGCGAG GTGGAGCTGG TTCAACCGAT ATCTTGATCT	1380
CATGGATCTA CCGTTTGACA ACAGGTACAT CTCCTCAATA CTCAATGGCG GCAGCTGTTA	1440
CCTTGATTAT CTCTATCATT GTCATCTCAA TCTCTATGAT CGCATTCAAG AAACCTACACG	1500

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CATTTGATAT	GGAGGACGTC	TAAGATGAAT	AACTCAATTA	AACTCAAACG	TAGACTGACT	1560
CAAAGCCTTA	CTTACCTTTA	CCTGATTGGT	CTATCAATTG	TAATTATCTA	TCCACTGTTG	1620
ATTACCATTA	TGTCAGCCTT	TAAAGCAGGT	AACGTCTCAG	CCTTTAAACT	AGATACTAAT	1680
ATCGACCTCA	ATTTTGATAA	CTTTAAAGGC	CTCTTCACTG	AAACCTTGTA	CGGTACTTGG	1740
TACCTCAACA	CTTTGATTAT	CGCCTTAATT	ACCATGGCTG	TTCAAACAAG	TATCATCGTA	1800
CTTGCTGGTT	ATGCTTACAG	CCGTTACAAC	TTCTTGGCTC	GTAAACAAAG	TTTGGTCTTC	1860
TTCTTGATCA	TCCAAATGGT	GCCAACTATG	GCCGCTTTGA	CAGCCTTCTT	CGTTATGGCG	1920
CTTATGTTGA	ACGCCCTTAA	CCACAACTGG	TTCTTCATCT	TCCTCTACGT	TGGTGGTGGT	1980
ATCCCGATGA	ATGCTTGGCT	CATGAAAGGC	TACTTCGATA	CAGTGCCAAT	GTCTTTAGAC	2040
GAATCTGCAA	AACTAGACGG	TGCAGGACAC	TTCCGCCGCT	TCTGGCAAAT	TGTTCTACCA	2100
CTTGTTGCGC	CAATGGTTGC	CGTACAAGCT	CTCTGGGCCT	TCATGGGACC	TTTCGGGGAC	2160
TACATCCTCT	CTAGTTTCTT	GCTTCGTGAG	AAAGAATACT	TTACTGTTGC	CGTAGGTCTC	2220
CAAACCTTCG	TTAACAATGC	GAAAAACTTG	AAGATTGCCT	ACTTCTCAGC	AGGTGCTATC	2280
CTCATCGCCC	TTCCAATCTG	TATTCTCTTC	TTCTTCCTAC	AAAAGAACTT	TGTTTCAGGA	2340
CTTACAAGTG	GTGGCGACAA	GGGATAATTT	ATCCCCGCCA	CCCTTTTTC	TTTTATACTC	2400
TTCGAAAATC	TCTTCAAACC	ACGTCAGCTT	TATCTCCAAC	CTCAAAGTTG	TGCTTTGAGC	2460
AACCTGTGGC	TAGTTTGAC	TTTGATTTTC	ATTGATTATT	AGCAATTGTC	ACTGTAAATA	2520
ATATCCTTGT	AGCAAGCAAT	TTTTCTCCTA	GACTTGAAAT	AAAGCGCATT	TCTCTATATA	2580
ATAATACTCA	TATAGAAAAC	ACCTTTTAGA	AAGATACCTA	TGCTTCCATA	TCCATTTTCC	2640
TATTTTTC	GTATTTGGGG	GGTTCGTAAG	CCCCGTCCA	AACGTTTCGA	GCTCAACTGG	2700
TTTCAACTTC	TCTTTACCAG	TATCTTCCTT	ATCAGCTTGT	CTATGGTACC	CATTGCTATC	2760
CAAAACAGCT	CCCAGGAGAC	CTATCCGCTA	GAAACTTTTA	TCGATAATGT	CTATGAACCT	2820
CTGACAGATA	AGGTGTGCTA	GGATCTCTCT	GAACATGCTA	CAATTGTCGA	TGGCACATTA	2880
ACTTATACTG	GAACAGCTAG	TCAAGCCCCT	TCTGTTGTGA	TTGGTCCAAG	TCAAATCAAG	2940
GAATTACCTA	AGGACTTGCA	ACTGCATTTT	GATACAAATG	AGCTAGTCAT	CAGCAAGGAA	3000
AGCAAGGAAC	TGACCCGCAT	CTCTTACCGA	GCCATTCAGA	CTGAGAGTTT	CAAAAGCAAA	3060
GACAGCTTGA	CCCAAGCAAT	TTCTAAAGAC	TGGTACCAAC	AAAATCGTGT	CTATATCAGC	3120
CTCTTCCTAG	TTCTCGGTGC	GAGCTTCCTC	TTTGGTTTGA	ATTTCTTTAT	CGTCTCTCTT	3180
GGAGCTAGCT	TTCTCCTTTA	TATCACCAAA	AGATCACGCC	TCTTTTCATT	TAATACCTTT	3240

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AAAGAGTGCT	ACCATTTTAT	CTTGAACTGT	TTAGGATTGC	CGACTCTGAT	TACACTTATT	3300
TTGGGATTAT	TTGGCCAAAA	TATGACAACC	CTGATTACTG	TACAAAATAT	TCTTTTGTGTT	3360
CTGTATCTGG	TCACTATCTT	TTATAAAACA	CATTTCCGTG	ATCCAAATTA	CCATAAATAG	3420
GAGATTTTAA	TGCCCCGTAC	GATTAAAGAC	GTGGCCAAGG	CTGCTGGTGT	TTCGCCTTCA	3480
ACCGTAACCC	GTGTTATTCA	AAATAAATCA	ACCATTAGCG	ACGAAACAAA	AAAACGTGTT	3540
CGCAAAGCTA	TGAAGGAACT	CAACTACCAC	CCAAACCTCA	ACGCTCGTAG	CTTGGTAAGC	3600
AGCTATACTC	AGGTTATCGG	ATTAGTTCTT	CCTGATGACT	CAGACGCCTT	CTACCAGAAT	3660
CCTTTCTTTC	CATCGGTTCT	ACGTGGCATC	TCTCAAGTCG	CATCTGAAAA	CCACTATGCC	3720
ATTCAGATAG	CAACAGGGAA	AGATGAGAAG	GAGCGTCTCA	ACGCTATTTT	ACAAATGGTC	3780
TACGGCAAGC	GTGTAGATGG	GCTAATTTTT	CTCTATGCCC	AAGAAGAAGA	CCCTCTCGTA	3840
AAACTCGTCG	CAGAAGAACA	GTTCCCCTTC	CTTATCTTAG	GTAAATCTCT	ATCTCCTTTC	3900
ATCCCACCTG	TCGACAACGA	CAATGTTCAA	GCTGGTTTTG	ATGCGACTGA	ATATTTTCATC	3960
AAAAAAGGCT	GCAAACGCAT	TGCCTTTATC	GGAGGAAGTA	AAAAGCTCTT	CGTGACCAAA	4020
GACCGTTTAA	CAGGCTATGA	ACAGGCGCTT	AAACATTACA	AACTTACCAC	TGACAACAAT	4080
CGCATCTACT	TTGCCGACGA	GTTTCTGGAA	GAAAAGGGCT	ATAAATTTAG	CAAGCGATTA	4140
TTCAAGCACG	ATCCACAAAT	TGATGCTATC	ATCACAACCG	ATAGCCTCCT	AGCTGAAGGT	4200
GTTTGTAACT	ATATTGCCAA	ACACCAGCTG	GATGTCCCTG	TTCTCAGCTT	TGACTCGGTT	4260
AATCCCAAGC	TCAACTTGGC	AGCCTATGTC	GATATCAATA	GTTTAGAGCT	TGGTCGTGTT	4320
TCCCTTGAAA	CTATTCTCCA	GATTATTAAT	GATAATAAAA	ACAATAAACA	AATTTGTTAC	4380
CGTCAATTGA	TCGCCCACAA	AATTATCGAA	AAATAAGAGA	CTGGGCAAAA	AGTCGTTAAA	4440
AGCAAAAACG	CATACTATCA	GGTATTGAAA	AAACTTGATA	CTATGCGTTT	TATTGTGGGA	4500
AGATTTACTT	CCTTTTCTAC	TGAAATTGAG	TCTTTTCCCA	AGATCTTTTT	ATACTCAATG	4560
AAAATCAAAG	TGCAAAC TAG	GAAGCTAGCC	GCAGGTTGCT	CAAAACACTG	TTTTGAGGTT	4620
GTAGATGAAA	CTGACGAAGT	CAGTAACCAT	ACCTACGGCA	AGGTGAAGCT	GACGTGGTTT	4680
GAAGAGATTT	TCGAAGAGTA	TTAATCACTA	ATTATCTATC	TCAACAAATC	TTCTTAGAAT	4740
ATGAACATTT	TCCGAGACAG	AGACAAAGGA	GCTTGGATCC	ACTTGTGTCA	TAATCTGTTT	4800
AAATTCATTA	AACTCTGCAC	GTGTAATGAC	AGTGATTAAA	ACTGCCTTTC	TCTCGTGATT	4860
ATAGGTTCCCT	TCTGCATCGT	GGATCATGGT	TGCTCCGCGG	TGCAATTTTT	TATGGATTTT	4920
TTCAATTACC	TTCTCTGGAT	GATTTGTCAC	AATCATGGCC	TGCATACGCT	TTTGCTTAGT	4980
AAAGACTGCG	TCTGTCACAC	GGCTAGAGAC	AAAGATGGTA	ATCATAGAAT	AAAGAGCGTA	5040

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TTTCCAACCA	AAGGTCAAAC	CTGCTATCAG	CATGATAGTT	CCATTTACCA	AGAAAGAAAT	5100
ACTACCGACA	TTCTTACCCG	TTTTCTTACG	AATAGTCAGG	CTGACGATAT	CCGTCCCACC	5160
ACTGGAGATA	TTGTTTCGAA	GAGCAAAACC	AATCCCCAAA	CCCATAACAA	CACCCCCAAA	5220
AAGGGAATTG	ATAATGGGAT	CCTCTGTCAA	GGTTGCCACA	GGGACAAACT	GGATAAAGAA	5280
GGAACTCATA	GATACCGTGA	TAAAGGTAAA	GACGGTGAAC	TTATGGCCAA	TCTGATACCA	5340
AGCTAAGACC	ATCAAAGGGA	AGTTAATGGC	GTAGAAGCTT	AGCGAAATCG	GAATATGAAA	5400
ACCAAACCAG	TGATTACTCA	AGGCAGAGAT	AATCTGTGCC	AGACCTGTTG	CACCACTCGA	5460
ATACACATGC	CCTGGTTGGA	AAAAGAAATT	AACTGCTACT	GCTGATAAAA	AACCATAGAC	5520
CAGAGAGGCC	GAAATCTTCT	CATCATACTT	TTCTCGAGAG	ATACTTTGTA	AGACACGTAA	5580
AATTTTTATC	TGATAAGCAA	AGCGGCGCAG	ATAATAGCGC	CACCGCTTAA	TTCGTTTTGT	5640
TTGTTTCATC	TTCTTCTACT	TGTAAGCTGA	GTCCTCTAG	TTGTTTGAGA	GCGACTGTTG	5700
ATGGAGCTTG	TGTCATTGGG	TCAGTTGCCT	TGTTGTTCTT	AGGAAAGGCA	ATGACTTCAC	5760
GGATATTTTC	TTCTCCAGCA	AGCAACATGA	CAAAACGGTC	AAGCCCATA	GCCAAACCAC	5820
CGTGTGGTGG	GAAACCATAG	TCCATGGCTT	CAAGAAGGAA	ACCAAAGTGG	TCATTGGCTT	5880
CTTCAGTTGA	GAAACCAAGA	GCCTTGAACA	TGCGTTCTTG	AAGGTCTTTT	TGGTTGATAC	5940
GAAGGCTACC	ACCACCAAGC	TCATAACCGT	TCAAGACGAT	ATCGTAAGCA	ATGGCACGAA	6000
CCTTAGCCAA	ATCACCTTCT	AATTCATGAG	CAGTCTCTTC	CTGTGGAAGT	GTGAAAGGAT	6060
GGTGGGCGCT	CATGTAGCGG	CCTTCTTCTT	CAGACCATTC	AAACATCGGC	CAGTCAACCA	6120
CCCAAAGGAA	GTTGAACTTA	TCATTATCAA	TCAAGCCAAG	CTCTTTAGCA	ATACGTCCAC	6180
GAAGGGCACC	CAGTGTTGCA	TTAGCCACTT	CAAGCGTATC	CGCCACAAAG	AGAACCAAGT	6240
CCTTATCTTC	AAGAACAAGC	GCTGTTGTCA	ATTCTTCTTG	GATACCAGTC	AAGAACTTGG	6300
CAACTGGTCC	GTTTAATTCT	CCATCAACCA	CCTTGACCCA	AGCAAGACCT	TTGGCACCAT	6360
ACTGTTTGGC	TACTTCCGTC	ATCTTGTCGA	TGTCTTTACG	TGAATAGTTG	TCCGCAGCTC	6420
CTGTGACCAC	AATCGCTTTT	ACAGCAGGTG	CTTCTGAAAA	GACTTTAAAG	TCTACACCTC	6480
GGACCACTTC	TGTCAAGTCC	TGAAGCAACA	TGTCAAAACG	AGTATCTGGC	TTGTCAGAAC	6540
CGTAAAGAGC	CATAGCATCA	TCGTATTTCA	TACGAGGGAA	TGGTAGCGTT	ACTTCGATGC	6600
CTTTTGTTTC	CTTCATCACG	CGCGCGATCA	AGCTTTCTGT	AATATCTTGG	ATTCTTGCT	6660
CAGTAAGGAA	GGACGTTTCC	AAGTCGACCT	GAGTAAATTC	AGGCTGGCGG	TCTCCACGCA	6720
AGTCCTCGTC	ACGGAAACAT	TTAACGATTT	GGTAGTAACG	GTCAAAACCA	GCATTCATCA	6780

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AGAGCTGTTT	CGTGATTTGT	GGACTTTGAG	GAAGAGCGTA	AAAATGCCCC	TTATTAACAC	6840
GAGACGGCAC	TAAATAATCA	CGCGCCCCTT	CAGGCGTTGA	CTTAGAAAGG	AATGGTGTCT	6900
CCACGTCGAT	AAACTCCAAC	TCATCCAAGT	AGTTGCGGAT	AGAGTGGGTC	ACCTTGGCAC	6960
GAAGTTTAAG	ATTTTCCAAC	ATTTCTGGAC	GACGAAGGTC	AAGGTAACGG	TAACGCAAAC	7020
GTGTATCGTC	ATTTGCCTCA	ATGCCATCCT	TAATCTCAAA	TGGTGTGTGC	TTAGCTGTGT	7080
TAAGCACAAT	AAGAGCTGTC	ACGTTTAACT	CAACCGCACC	AGTTGGCAAC	TTATCATTTG	7140
CTTGTCACGC	GCAGCGACCT	GACCAGTCAC	CTCAATAACA	AATTCGCTAC	GAAGGcTTTC	7200
AGCTGTTGCC	ATAACCTCTG	CAGATACTTT	TTCAGGGTTG	ATAACCAACT	GCATGATTCC	7260
TTCACGGTCA	CGAAGATCGA	TAAAGATCAA	ACCACCAAGG	TCACGACGAC	GGCCAACCCA	7320
TCCTTTCAAG	GTTATTTCTT	GTCCGATGTG	TTCCTCACGA	ACACGACCAG	CATACATACT	7380
ACGTTTCATT	ATTTCTCTCC	TCTTTTATTC	TGTTACTATT	TTACCATAAA	AGCGCAGCTC	7440
TTCATGAAAA	TCATCAGAAA	AGTTTGCCAG	TCTTTAAAAG	TCAGGTGAAA	GCCCTAAAAA	7500
TTAGCGCTAA	TACTCTTCGA	AAATCTCTTC	AAACCACGTC	AGCGTCGCCT	TACCGTATGT	7560
ATGGTTACTG	ACTTCGTCAG	TTTCATCTAC	AACCTCAAAA	CCATGTTTTG	AGCTGACTTC	7620
GTCAGTTCTA	TCCACAACCT	CAAAACAGTG	TTTTGAGCAA	CCTGCGGCTA	GCTTCCTAGT	7680
TTGCTCTTTG	ATTTTCATTG	AGTATAATAC	AAAAATCCGA	TGAAC TTCAC	CGGACTCTTT	7740
TATTTTGAAT	TTTTGCCTGC	TTTACGCTTT	TCAGCGATTT	CGGCTGCCTT	TCGAGGCAAG	7800
ACAATTTCCG	TTATGTAAGC	CGTCCCAAAA	CGCAGTACAC	CTGCAATAGG	AGCAAAGACA	7860
ACTGCTAGAT	AGTTATAGAA	GAAATCGCCT	TTGAAGGCAT	AAGCTAGCGC	TCCAATGATG	7920
AAAAATAGAA	CGACTGCCTG	AATCACTGCT	AATAAAATTA	CTCGTTTCAT	GTGACCTCCT	7980
GACTCTATTA	TAGCATGAGA	ATCATCAAAA	AGCCGACTAA	ATTATTCAAA	GCGTGAAGAG	8040
AAATACTGTA	GACCAGACCT	TTTCTGCTAA	TGTAAGCCAA	ACCCAAACTA	AAACCAAGGC	8100
TAAAATAGAC	AAAAAATTGT	TGCACATCAC	CTGGAAAATG	AATCAAGGCA	AATAGAAGAC	8160
TAGATACCAG	AAGAAAAATC	AGGGTTCGTT	TACTATTGTC	CTGCTTAGGA	AAGAGATAGC	3220
GTGCTAACAT	CCCTCTAAAA	ACAATCTCTT	CCGTCAAAGG	AGCAAAAATA	ACCACAGCAA	8280
AGAATGAGAA	AAGTGGTTGA	GACAAGGTCA	AGTCTGTTCG	TATTTGCTGA	TTTACTGAAG	8340
GATCATCTGG	CAAGAAGAAT	TGAACGACCA	GAGATAAGAA	CCAAACCAAG	ACAGGAAGCC	8400
AAATAAATCG	ATTAAAGCCG	CTCTTCTCAA	TATGAACAGG	AGCCTTCTGA	TACCATTTGT	8460
AAATGCCGTA	CACATATACT	CCAGCCAAGG	CCACATAGAG	TAGAGTAACA	GCATAGGGTG	8520
AAGCGCCTAA	AGCAAGCGAC	GCAGTCGCGA	GCCCCTGAAT	AAAGCCATAG	ATAAAATAAA	8580

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AGGATAGAAG	GGCTAGAAGA	ATCCAGCCAA	GGTTTTTAAG	TAATTTTCATA	GATAACTCCT	8640
TTATTTGAAA	TAACGTTTTA	CCATAGGTAA	CTGCATCACA	TTGATATAAA	CATGGATGGC	8700
TCCTACAAGC	AAGAAAGCTA	GTAACCTGAAT	CTCTCCTGTC	AAGAAAGAAA	TGATAATAAG	8760
AAAAATATAT	AAGGCTGGTA	AGACATATTG	GTGTAATTGG	AATAAAATTC	GAAAACTCTG	8820
TTCCAAATTA	GCCTGACGCT	CCCCTTCATC	ATAAGAATTT	ATATAGTTCA	AGACATCCTT	8880
TGGTGTAGCG	AAAAATTCCA	AATCAAACCTG	ACGAACAATC	GCAATGGTTT	TAAAAAGAGA	8940
TTTTTGAGCG	ACTAAGAATA	CCACAAAGAG	TAAGAAAGAA	AGGAAAAATG	TTTGAGGGTT	9000
TGTATGCAAT	ATAATCACCT	CACTTAATGA	AATAAAAATA	GCCAATGGAA	TCGCTACACC	9060
TGTAATATTA	AAAGCAATGG	TTCCAAACTC	AAGATTCCGA	TACATTTGCA	CATAATAGGT	9120
TTCATTCAGA	TCGTCATCCA	TTTCCTCTTG	ATACAAAGAA	TGAAATTTTC	TGCTTTTCTT	9180
TAAGAAATTG	AAAGTCAAAA	ACATACTAAT	GAAACCTATC	AGTAAACAAA	TAGCTGATAT	9240
CCATGGCATC	AAGGCTTTTA	CATCTAAAAT	AATTTTCGTGG	GATTCGACAC	GTGCCTTAAA	9300
CATCCCTACA	AACATGCCCA	AGAACCCCCC	AAGACAATAG	ACATCAAAAA	TAACAATCTA	9360
CGTTTCTTTT	TCATATTCAT	TCTCCTTTTT	CACTTGCTAG	ATTTTTGGAT	TTCTTTTCAA	9420
TCCATTCAAT	TACTGGGATG	AGAGCAAAGT	AGACCCAAAC	AAATTGGTCG	CTTTGATAGG	9480
GATTAAACCA	GCTTAGGTCC	ATCCCAATCA	GTAGAAATAC	GCTGACTAAT	AAAGCTATGA	9540
CCACTACATA	ATAAATCACT	TTATACTTGT	TCATCACTCG	TCCTCCTCCA	AACGAAATAC	9600
CGATTGACT	GTTTCGTTGA	AAATTTGAGA	TATTTTCAGG	GCAATGATAA	TGGATGGGGT	9660
GTACTCATCC	CGTTCTAGTA	GGCTAATGGT	CTGTCTGGAA	ACCCCTGCCA	GTTTGGCTAG	9720
GTCGGTTTGA	TTGAGACCAT	CGCGAGCTCG	AAGCTCTTTT	AGACGATTTT	TTAGTTGCAT	9780
GTTACACACC	TACTCTCCGT	CAAATTCAAC	GGTTTGGATA	TCCTCAATAC	GTTGCAACTT	9840
GAATTTTCT	TTTCCCGTAT	TATCTACACG	TCGTAGCTTT	ACCCATTCCT	CATCAACATC	9900
CACAACTTCC	CAGTTATCTG	GCCCAATATA	CACTCCCGTT	ATAATTGGTT	CCTTTCCAAT	9960
CATTTCTTGT	AATAATCTCG	ACATTTCTGC	GTTTCCTTTC	TCTTTTCGCT	CAAGTCTTTT	10020
GATTTTATTC	TCTAGTTTCT	TGATTTTTTT	AGAATTATTA	GAATAAAAGA	AAATCATAAA	10080
TAGTATAAAT	CCTAGTACCC	ACATTATAAC	TCCTTTCTGC	TTCCTATTTT	TTAACTTGAA	10140
TTCATTGTAA	CATATCTTTT	TCTTTTGTAC	AAGTATAGTT	GTCAAAAAAA	TTATGATTTT	10200
TGTCATTTTG	CAAAGAAAAA	AGGTCAGGAG	TAGGTTCCCTG	ACCACTTTAT	CTATCATTAA	10260
TACTCTTCTA	AAATCTCTTC	AAACCACGTC	AGCTTCACCT	TGCCGTAGGT	ATGGTTACTG	10320

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ACTTCGTCAG	TTTCATCTAC	AACCTCAAAA	CCATGTTTTG	AGCTGACTTC	GTCAGTTCTA	10380
TCCACAACCT	CAAAACCATG	TTTTGAGCTG	ACTTCGTCAG	TTCTATCCAC	AACCTCAAAA	10440
CCATGTTTTG	AGCTGACTTC	GTCAGTTCTA	TCCACAACCT	CAAAACAGTG	TTTTGAGCAA	10500
CCTGCGGCTA	GCTTCCTAGT	TTGCTCTTTG	ATTTTTATTG	AGTATAAAAT	CCTAGTTTTT	10560
CAAAGATTTT	TGAGAAGTTT	TGGCTGATTG	TCTCAAGTGA	CACCTGCACT	TCTTCTCGGG	10620
TTTGGTTGTT	CTTGACCGTC	ACTTGTCCTG	TTTCGACTTC	GCTCTCTCCT	AGGGTGATGA	10680
GGGTCTTAGC	CGCAAAGACA	TCGGCTGACT	TGAACTGAGC	TTTTAGTTTA	CGGTTGAGGT	10740
AATCACGCTC	TGCTTTGAAA	CCTTGTTGGC	GAAGAGCCTG	TACCAATTCC	AAGGCCTTGA	10800
TATTTGCCCC	TTGCCCCAAG	ACTGCGATAT	AGACATCTAG	GGCGTTTTTC	ATAGGGAGGG	10860
TCACACCTTG	CTTTTCAAGG	ATGAGAAGCA	GGCGCTCTAC	ACCAAGTCCA	AAACCAAATC	10920
CAGCAGTTTC	AGGGCCTCCA	AAGTAAGCAA	CCAAACCATC	GTAGCGACCA	CCCGCACAGA	10980
CGGTCAGGTC	ATTGCCCTCA	ATCTCTGTGA	TAAACTCGAA	AATGGTGTGG	TTGTAGTAGT	11040
CCAGACCACG	CACCATATTG	GTATCGATGA	TGTAATCTAC	TCCAAGATTT	TCCAACATCT	11100
GACGCACAGC	ATCAAAATGA	GCTTGGCTTT	CTTCATCAAG	AAAGTCCAAG	ATAGACGGCG	11160
CATTCTCTAC	TGCCACCTTG	TCTTCTTTTT	CCTTAGAGTC	CAAGACACGA	AGAGGATTTT	11220
CCTCCAAGCG	ACGTTGGCTA	TCCTTAGACA	AGGTCTCCTT	GAGCGGTGTC	AAATAGTCAA	11280
TCAAGGCTTG	GCGGTAGGCT	GCACGGCTCT	CAGGATTTCC	AAGAGTGTTG	AGGTGCAATT	11340
TGACACCTTG	AATACCGATT	TCCTTCAAAA	AATGGGCTGC	CATAGCGATT	GTTTCCACAT	11400
CGGTAGCTGG	ATTGCTAGAG	CCAAAACACT	CAACACCAAT	CTGGTGGAAT	TGGCGCAAGC	11460
GCCCTGCCTG	TGGACGCTCA	TAACGGAACA	TAGGTCCCAT	GTAGTAGAAC	TTGCTTGGCT	11520
TTTGCACTTC	TGGGGCGAAA	AGTTTATTTT	CCACATAGGA	ACGGACAACG	GGTGCAGTTC	11580
CTTCTGGACG	GAGGGTAATA	TGACGGTCAC	CCTTGTCATA	AAAATCGTAC	ATTTCTTTGG	11640
TTACGATATC	CGTTGTATCT	CCGACAGAGC	GACTGATAAC	CTCGTAATGC	TCAAAAATAG	11700
GCGTGCGCAC	TTCTGCATAG	TTGTAGCGTT	TGAAAATCTC	ACGGGCAAAG	CCCTCAACGT	11760
ACTGCCACTT	AGCAGACTCA	GCAGGTAAAA	TATCCTGCGT	TCCTTTTGGT	TTTTGTAAAT	11820
TCATAGGGAA	TCCTCTTTAA	ACTTAATAGT	CTTATTTTAC	CATAAATAGA	GGGATTAAAA	11880
CAGTAAGAAA	AAAATTAGGA	TTTAGATATC	ATTTTTGAGA	TTAAGAATTG	TCAAAAAAAT	11940
AGCTAGCAAG	GAAAGACCAA	CAAATAGCAT	CCAAGTCAAC	TGTATATTCC	ATACGGCTAC	12000
TAGTGAAAAA	CAAGCTGTTC	CCACAGGTAT	GGATAAGGTA	AACAATAGAC	CTAAAAAATT	12060
ACTAGTACGA	GCTAGAACCT	CTGGAGCTAG	ATTTTTCATG	AGCATGGCAC	TAATCTTTGG	12120

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TTGAACTTTA CCAGACACAT ACAGAGTAAA GAAGAGAAAT AGCAAACCAA GCACGACTTG	12180
ATTGAATAAA TTAGCCAAAC CAACTAGACT AAGTCCTACG GTCTCCCACA TCATCAATCT	12240
AGGCAAGGAC TGCTTCCCAA AATAATCATT GCCCGTAAGG CTA CTGATGA TGACTGATAC	12300
TAAAACACAG AATTGATTGA TAAATAGTGC CTCTGTATAA GAAAAATTCA AGAGAGAATG	12360
GCTCAAAAAG AAGATATTAT AAATTCCACC CAAAGCGCCA CCCAAGGAAT TAATAAGCAA	12420
GACAGCAAAG AGCATAAAAC CAAAGTTTTT CTGTCCACTT TTAAGAAAAA CGAGACGTAA	12480
ATTTTCGGTAA ATTGTTAGGA ACTGGTCTTT GATAGAAAGC TTCTCATTTT TTAAGTTTTT	12540
ACCATCAGCA GATGACATTG ACAGGCTCAA TTTGCTTTTT CCTAAAAAGA GGATAGTGGC	12600
TGATACTAGG AAAAAGCAGG CATTGATTCC CGCAACGAGA GAAAAATTGT TGACCGATAG	12660
AGCTAAGAGC CAGACTCCGA AAGCTTGACC ACCAATAGCT GAAATATAGG TGATGAAC TG	12720
TGAAAAAGAA TAAGCCTCCA TCAGATCATC TTCAGCTACT TTTTCCTTAA TAAGAGGCAT	12780
ACGCAGGCCA CCTGCAAAAT CACTGATGAT ATCACTAATG ACATTGATCA AACACAGGCT	12840
AGAAAAGGCA AAGAGACTAG CTTGCTGAAC AACTAGGGCT GCTAGAAAAA ATAGAACCGC	12900
CTGAAACAAA CCGCTATAGA CCATCCATTT GACCTTGTC CTGCTGTAAT CTGCCCCGAAT	12960
CCCTGCAAAA ACTGTAAAGA GGGTCGGAAG AATCATGACA ATATTCGCCA TAGCAACAGC	13020
AAAAGATGCT TGTGACAAGG TCGATGCATA GACGATAAAG ACCAGGTTGA AAATCGAAAC	13080
ACCAAAGCA TTGAAGAAGC GTGG	13104

(2) INFORMATION FOR SEQ ID NO: 35:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 19250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35:

CCGGGCAAAT AGTTTTGAAC TTTTCATCAT TTTCTCCTTT AAAACTTTCT CTCCATTATA	60
GACTCTTTTC AGAAAGTTGT CAACAGAATT TTCAGAATTT TTGAAAATTA TTTTCAAAC	120
AACATCTTTG CAAAAAATAT GAATATCGTA AGCGCGTCAT AACAAGGTAT CTATCATTCA	180
TGGAGCTCCT CCTGTATACT ATTAGTAAAG TAAATATTGG AGGATATTTT AATGCCACAA	240
CCTATTGTTC CTGTAGAGAT TCCACAATCT CGTCGTTTTG ATTCTAAAAA GAGAAATGAT	300
ATTCTrCTTA AAATTCGTAT TGGCAAGCTT GAAGTAAGTT TTTTCAATC TCTCAATCTC	360

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GAAATGATAG	AACAGCTTTT	GGATAAGGTG	TTGCTCTATG	ACAATTCATC	TATCTAGCCT	420
AGGGCAGGTC	TATCTCGTGT	GTGGGAAAAC	TGATATGAGA	CAAGGAATCG	ATTCACTGGC	480
TTATCTCGTT	AAAACCCACT	TTGAATTGGA	TCCTTTCTCC	GGTCAAATCT	TTCTCTTTTG	540
TGGTGGACGT	AAAGACCGCT	TTAAAGTCCT	TTACTGGGAT	GGTCAAGGAT	TTTGGCTACT	600
ATATAAACGC	TTTGAGAACG	GCAGACTGAC	TTGGCCCAGT	ACAGAAAAGG	ATGTCAAAGC	660
TCTCGCACCT	GAACAAGTAG	ATTGGCTGAT	GAAAGGCTTT	TCTATCACTC	CAAAAATATA	720
GTAGATTGAA	ACTAGAATAG	TACACCTCTG	CTTCTAAAAC	ATTGTTAGAA	ATCGATTTTA	780
CTGTCCTGAT	CGATTTGTCC	TGTTATTATT	TCATTTTACT	ATAAATCCAT	CAGAAAGTCG	840
TGATTTCTAT	TGAAATGAGG	ACTTTCTTTT	TATACTCATC	TGCTTTCAAA	AAGCACTCTA	900
GTCCATCTCC	GATTAACGAT	GGACTTTATC	ACCTCCTTCT	CCAGTCCTTG	TATAACATCT	960
TGAAGTTGAT	TCATGACATC	TTCCAAAGTT	CGAAAGGCTT	TATTCTTAAA	TCCACGTTTA	1020
CGAATCTCTT	TCCACACTTG	TTCAATGGGG	TTCATCTCTG	GTGTGTATGG	AGGAATAAAT	1080
GCAAAGCCAA	TATTAGTCGG	AATCTTTAAG	GTACTTGATT	TATGCCATAT	AGCATTGTCC	1140
ATAACGAGTA	AAAGATAATC	ATCTGGATAA	GCTTGTGAAA	GCTCCTATTC	CTAAAGCCCC	1200
TTTATAACCT	CTTGCGAGAG	AGACTATTGA	CTCAGCCCTT	ACTTCATGCG	GATGAAACCT	1260
CCTATCGGGT	TCTAGAGAGT	GATAGCCATC	TGACCTACTA	TTGGACTTTT	TTGTCAGGTA	1320
AAGCAGAGAA	ACAAGGGATT	ACGCTTTACC	ACCATGATCA	GTGTCTGAAGT	GGTTCAGTAG	1380
TACAAGAAAT	CCTAGGAGAT	TATTCTGGCT	ATGTTTCATTG	TGATATGTTG	CGGCAGTAAC	1440
TTAGGACTTT	AGTCCTCTAG	TTCTGCCTAT	GCGATAGCAG	TCCAAGGTTT	AGGAGTAAGG	1500
CGACGCTAAG	CTTGGTAAAC	TGCGAACAGC	TAGAAGCTTA	TCGTCAACTG	GAAGAAGCTG	1560
CAC TTGTTGG	ATGTTGGGCG	CATGTGAGAA	GGAAGTTTTT	TGAAGTGCCC	CCCAAGCAAG	1620
CAGATAAATC	ATCCTTAGGA	GCTAAAGGTT	TAGCCTATTG	TGATCAGTTA	TTTTCTTTGG	1680
AAAGAGACTG	GGAGGCTTTG	CCAGCTGATG	AACGGCTACA	GAAACGTCAA	GAACATCTCC	1740
AACCCCTACT	GGAAGACTTC	TTTGCTTGGT	GCCGTCGTCA	GTCAGTTTTA	TCGGGTTCAA	1800
AAC TAGGAAG	GGCAATTGAA	TACAGCCTCA	AGTATGAAGA	AACCTTTAAG	ACCATTTTAA	1860
AAGACGGACA	TCTGGTCCTT	TCCAATAATC	TAGCTGAACG	CGCCATTAAA	TCATTGGTTA	1920
TGGGACGGAG	TAAAAGAGTC	CAGTGGACTC	TTTTAGCCTA	AGCTCAGTTT	AAAAAAACGA	1980
GGGTGGTTAT	TTTTAAAAAA	GCGAGGGTGG	TTATTTTCTC	AAAGTTTTGA	AGGAGCTAAA	2040
GCAAGAGCTA	TTATTATGAG	TTTGTTGGAA	ACAGCTAAAC	GTCATCAATT	ATAGTGC GTT	2100
GAATCTATAA	CAGTACGCAT	CGACTGCTAA	AATATTTCTA	TAAATCAATT	TTCTTTTCCT	2160

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AATCGATTTG	TTCATATCTT	ATTACAATCC	ATTATAAATA	GCGAGAAATA	TCTATCCTAT	2220
CTTCTAGAAT	GTCTTCCAAA	CGAGGAAACT	CTCGTAAACA	AAGAGGTTTT	AGAGGCCTAT	2280
TTACCGTGGA	CTAAAGTTGT	ACAAGAAAAG	TGCAAATAAG	AAATCTCCAG	ATTAGGAACT	2340
ATATATGAGT	TCTCTAGTCT	GGAGATTTTT	CAATAGACTT	CGTTATTGGG	CGGTTACTTT	2400
CGAAACTTTG	AAAAC TTCAA	AAAACGGATT	TTTATCGCTC	TGAACATCAA	AAAAGAAAGG	2460
ACGAAATTTG	TCCTTTCTCA	AGCTTAGCTT	TTCTTCAACC	CACTACAGTT	GACAAAGAGC	2520
CCTTTATTCT	ATCAAACATG	AAGCGCAAAA	ACAAGCCAAA	AATCCGATAG	AATGGCTATC	2580
CCTCGACTAT	CAAGTAAGAC	ATTTCCATCA	AATACGTTCA	ATTTTACTCT	TGTTCTACTA	2640
AGAATTAATC	ATCTCGTTTT	GATTTATTAA	AAATATACAA	TTCAGCTTTT	CCTCCAAACT	2700
ATTTTATCCA	CTATCCCTGT	ATAGCTCTGT	ATTATCTTAA	CAACTTTAGT	AGAGACATTT	2760
TCCTCAACAT	AATCCGGAAC	CGGTAATCCA	AAATCCTCAT	CTTGTGCCAA	GCTAACAGCA	2820
GTTTCAACTG	CTTGAAGAAG	AGAATTTTCA	TCAATGCCTG	CCAAAATAAA	TCCTGCCTTA	2880
TCTAAGGACT	CAGGACG TTC	TGTACTTGTA	CGAATACATA	CAGCGGGAAA	AGGATAACCT	2940
TGACTAGTAA	AGAAACTACT	TTCTTCCGGT	AAAGTTCCCG	AATCAGATAC	TACAACAAAT	3000
GCATTCATCT	GTAAACAATT	ATAGTCATGG	AATCCTAGTG	GCTCATGCTG	AATCACACGT	3060
TTATCTAGTT	TAAAACCGCT	CTCTTG TAGC	CTTTTCTTTG	ATCTAGGATG	GCAAGAATAT	3120
AAGATTGGCA	TATTATACTT	TTCAGCTAAT	TGATTAATTG	CTGTAAAGAG	AGAAATAAAA	3180
TTTTTTATCTG	TATCAATATT	TTCTTCACGG	TGAGCTGAAA	GTAAGATATA	ACCTCCTTTT	3240
TTCAATCCCA	AACGTT CATG	GATATCTGAA	GACTCAATAG	CAGATAAATT	TTTATGTAAC	3300
ACTTCTGCCA	TAGGAGAACC	AGTTACATAT	GTGCGCTCTT	TAGGTAAACC	ACACTCATGT	3360
AAATACTTAC	GTGCATG TTC	AGAGTATGCT	AAGTTAACAT	CTGAAATAAC	ATCAACAATC	3420
CGACGATTAG	TCTCTTCCGG	TAGGCACTCA	TCTTTACAGC	GATTGCCAGC	CTCCATATGA	3480
AAAATTGGAA	TATGTAAACG	CTTGGCAGCA	ATAGCTGATA	AACAAGAATT	TGTATCCCCT	3540
AAAATCAATA	AAGCATCTGG	TTTAATT TGA	TTCATCAATT	TGTATGAAGT	ATTAATAATA	3600
TTCCCTACAG	TAGCACCAAG	ATCATCTCCA	ACAGCATCCA	TGTATACGTC	CGGAGTGTCT	3660
AACCCTAAAT	TATCAAAGAA	AATACCATTT	AAATTGTAAT	CATAGTTTTG	TCCAGTATGT	3720
GCCAAAATAA	CATCAAAATA	CTTTCGACAT	TTAGTGATAA	CACTACTTAG	ACGTATAATC	3780
TCTGGACGTG	TTCCCACAAT	AATCAATAAC	TTAAGTTTGC	CATTATCTTT	AAAGTGAATA	3840
TCACTATAAT	CTGTCTTAAT	TTTCATTTAT	TTCTCCACTT	GTTCAAAAAA	AGTATCTGGA	3900

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TGTCTAGGAT	CAAATGACTC	ATTAGCCCAC	ATGACAGTAA	TTAGATTTTC	TGTATCAGAA	3960
AGATTAATAA	TATTATGTGC	ATAGCCCGGT	ATCATATGTA	TTGCTTCAAT	CTTATCGCCC	4020
GACACTTCAA	AGTTCAGAAT	AGGATACTCT	TGACCGTTTT	CATCCAGCCC	TATCCTACGC	4080
TCTTGTATTA	AAGCACGACC	AGAAACAACC	ATGAAAAATT	CCCACTTAGA	ATGATGCCAA	4140
TGTTGCCCTT	TGGTAATGCC	AGGTTTAGAA	ATATTAACAG	AAAATTGACC	CGTATTTTCT	4200
GTTTTTAATA	ATTCCGTAAA	ACTACCTCGT	TCATCTATAT	TCATTTTTAG	AGGAAACTTA	4260
AACTTATCTA	CTGGTAAATA	AGATAGGTAG	GTAGAATACA	ATTTCTTTTT	AAACGATCCC	4320
TGAGGAATTT	CAGGCATAAC	TAAACTATCA	GGCTGTTTTT	TAAATGTTTC	TAATAGAGAG	4380
ACAATCTCTC	CTAAGGTTGC	ACGATGAGTC	GTTGGTACGT	AGCAGTAGTT	TCCTGATGGG	4440
CTAGGTAAGA	TTTGTAATCC	ATCTAGATTA	CAACGATGAG	GATTTCCCTTC	CAATGCAGTT	4500
AGACACTCTT	GTATCAAATC	ATCAATATAC	AGCAACTCCA	ATTCTACACT	TGGATCATTT	4560
ACTTGAATAG	GTAAATCGTG	AGCTAGATTA	TAACAGAAAG	TTGCTACAGC	AGAATTGTAG	4620
TTAGGACGGC	ACCACTTCCC	ATAAAGATTC	GGGAAACGGT	AAACTAAGAC	AGGTGCTCCC	4680
GTTTTCTTTC	CATATTCAAA	GAAGAGTTCT	TCCCCTGCTA	GCTTAGATTG	TCCATATATA	4740
GAGTTTGAAA	ATCGGCCTTC	TAAACTAGCT	TGAGTAGAAC	TTGAGAGTAG	AACAGGACAA	4800
GTGTTTTCAT	ACTTTTCTAA	AATCTCCAAT	AATCTACTTG	AAAAACCGTA	ATTTCCCTCC	4860
ATGAATTCAT	CAGGATTCTG	TGGACGATTG	ACACCAGCTA	AATGGAATAC	GAAATCGGCC	4920
TTCTTACAAT	ATTCATCTAA	TAAAATCGGA	TCTGTATCAC	GATCATACTG	AAAAATCTCT	4980
CCAATCTCTA	AATTAGGACG	AGTCCTATCT	CGTCCATCTT	TCAAAGCTTC	CAGAGTACAG	5040
ATAAGATTTT	TTCCTACAAA	TCCTTTCGCT	CCTGTGATTA	AAATATTTTT	AATCATGCCC	5100
CCTCCTTATT	TTATATGCTG	TTTTAATAGT	TAACCTCTCT	GACAATACAT	GATACATTAT	5160
ATATCCTTGA	TAATTTTAAT	GTATCTTAAA	AGATTTTACA	TCTCTTCGTC	TGCTACCATA	5220
TCACGAATTG	CTGTCTGTAT	TTCATCTAAT	TCTAGCAACT	TTCTTTTAAC	TTGCTCTACA	5280
TCCATCAAAT	CGGTATTATT	ACTATTGAAT	TCTGTCAACA	AATTTCTATT	CGTACTACCA	5340
TCTTTGAAAT	ACTTATCATA	GTTAAGATTA	CGATTATCAC	TAGGAACTCT	ATAAAAATCA	5400
CCCAAATCAA	TTGCATTTGC	GCACTCTTCG	TTAGTTAATA	GTGTTTCATA	CCTTTTTTCT	5460
CCGTGTCTAA	TACCTATAAT	CTTAATATCT	TGTTCTGAGG	CAAAAATTTT	TGATACAGCC	5520
TTAGCCAACA	CTTCAATCGT	ACATGCTGGT	GCTTTCTGAA	CTAGTATATC	TCCAGATTTT	5580
CCTTCTTCAA	ATGCAAATAA	AACCAAGTCT	ACTGCTTCTT	CCAATGTCAT	CACAAAACGT	5640
GTCATGCTAG	GTTCAAGTAAT	TGTAAGAGCA	TTTCCTTGCT	TAATTTGCTC	AATCCAAAGA	5700

GGAACGACAG	ATCCACGGCT	ACACAGAACA	TTCCCATAGC	GAGTCACACA	TATCTTTGTA	5760
TGCTCAGGAT	TTACCGTCCT	GGACTTAGCA	ACAGCAATCT	TTTCCATCAT	AGCCTTGGAT	5820
GTTCCCATAG	CATTGACAGG	ATAAGCCGCC	TTATCTGTAG	AAAGACAGAT	AACTTGCTTT	5880
ACACCAGCTT	CGATAGCCGC	AGTGAGGACA	TTCTCCGTTC	CCAAAATGTT	AGTTTTTACC	5940
GCTTCTACAG	GGAAAAATTC	ACAAGAAGGT	ACTTGTTTAA	GAGCAGCAGC	GTGAAAAACA	6000
TAATCCACAC	CATGCATAGC	ATTTTTTACC	GAAGCTAAGT	CACGCACATC	TCCAAGGTAA	6060
AAACGGATTT	TCCCAGCCAC	TTCTGGTACT	TTTACCTGAA	ACTCATGACG	CATATCATCT	6120
TGTTTCTTTT	CATCTCGCGA	AAATATACGA	ATCTCTGAGA	CATCTGTTTC	TAAAAAACGC	6180
TTGAGAACCG	CATTCCCAAA	TGAACCTGTC	CCTCCTGTAA	TTAGGAGAGT	TTTTCCTGTA	6240
AATTGTGACA	TATATTACAC	TTCTCCTTCT	AGTATGTCTG	CAATTTTCTT	ACAAGCCGTT	6300
CCATCTCCAT	ATGGATTTGA	AGCTTGACTC	ATTGCTTGAT	AAACTGAATC	ATTTTCTAAT	6360
AATTCTTTAA	AATGCCTATA	AATATTATTT	TCATCAGCAC	CTACAAGTTC	CAAAGTCCCT	6420
GCTTCAATTC	CCTCTGGACG	TTCAGTTGTA	TCTCTCATAA	CCAAAACAGG	TTTTCTTAAA	6480
CTTGGAGCCT	CTTCCTGAAT	ACCACCACTA	TCTGTTAAAA	TTAAATAACT	TCTTGATAAA	6540
AAATTGTGAA	AATCTAATAC	TTCTAAAGGT	TCGATCATCT	TGATACGTTC	ACAGCCACTT	6600
AGTTCTTCCT	CAGCAATTTG	GCGAACACGA	GGATTCATAT	GGATAGGATA	AATAGCCTTG	6660
ACATCTGAAT	ATTCTTCAAT	AATCCTTCTA	ATTGCTCTAA	ACATATGTCT	CATCGGTTCA	6720
CCAAGATTTT	CACGACGATG	AGCTGTAATT	AGAATAAACC	TGCTTTCTCC	TATCCATTCT	6780
AACTCAGGAT	GCGTATAGTC	CTCTTGAATT	GTAGTTTGTA	AAGCATCAAT	CGCCGTATTA	6840
CCTGTCACAA	ATATGCTCTC	TGGAGTTTTT	CCTTCTCTTA	AAAGATTATC	TTTTGAAAGT	6900
TGTGTTGGTG	TAAAATGATA	CTGAGCCAAA	ACCCCAACTG	CTTGACGATT	AAACTCTTCA	6960
GGATATGGTG	AATAGATATC	GTAAGTGCGC	AAACCAGCTT	CAACATGACC	AATTGGAATC	7020
TGTAAATAAA	AGGCCGCCAG	TGAACTAGCG	AAGGTCGTAC	TTGTATCCCC	ATGAACTAAC	7080
ACCAAATCAG	GTTTTTCTGA	CTCTAAAATA	GCCTTCATTC	CTTCCAAAAT	GCCAATGGTC	7140
ACATCAAATA	AAGTTTGTTT	ATCTTTCATA	ATAGACAAAT	CAAAATCGGG	AATAATCCCA	7200
AATGTGTCCA	AGACCTGATC	CAACATTTGA	CGGTGTTGGC	CCGTAACGCA	AACTAATGTT	7260
TCAATATTCT	TACGTGTTCT	TAACCTTTTG	ACCAAAGGAC	ACATCTTGAT	GGCTTCTGGA	7320
CGAGTTCCAA	ATACTACAAC	TACTTTTTTC	ATATATTTAC	TTACTCCTAA	CAAATAATGA	7380
ACGGTTCTTA	AAATAAATTA	GATAACGGCT	AATCCATAAC	ACCACCTCAG	ACATACTTGA	7440

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ACAAATAGCT	AATGTTACTA	AACTAAAATT	ATCAGACAAG	ATAAATATTC	CTAATCCCAA	7500
AGTTTGGACA	ATCGAAGCTA	ATATAGTTGT	CATTGTAGTT	TCTTTCACTT	TATCAATAGC	7560
TCCTAAGACA	GGCCATCCGT	AAATCATAGA	ATAAAAATA	GCAACAAAAG	CGGGTAATAA	7620
GTAATAAGA	AAATCTGCTG	AAACGGTATA	TTTTTCACCA	CCAATTATAG	AAAGAATTTG	7680
ATTTGAAAAG	AATAAAAATA	TCAAACTCC	AAAGATAATA	GGAATAAACA	TAATCCGATT	7740
AATACTCTTA	ACCGATTGTA	TATCTTTAGT	ACGTATCATA	TGCGGATATA	AACTATTTCG	7800
TATAGGATTA	TACAATGATT	TTGCTGCTGA	AAGCAGTTGC	ATTGCTATCC	CCCAAAGGC	7860
TATCTCTTGA	CTTTGTAAAT	AAAAACCCGA	AATGACTGTC	GTAAAGACGC	CAAAAATAGT	7920
AGTTGCAAAA	TTGGATAAAA	AATAAATAGA	GGATTCCTTT	AAATCTTTAA	CCCAAACAGA	7980
CAGATAAGAA	AATGATAATT	TAATTCCATA	ATAATGAAGG	AATCTATAAG	AACTACTGTC	8040
AGCAACTAAA	TTCCCAATTC	CTTCCAATAT	AGGAATCCAT	AAAATAGAAG	AATCATCTTT	8100
TACTACAATA	AATGTCAAAA	TTGTAATGAT	AGTTTTAGAA	ATAATATAAG	GAATTGCAAC	8160
TGCATGCATC	TTTTCAATTC	CACGAAATAA	AAAGTCAAAG	ATAAAAATAT	TGGTCACTGT	8220
AGCTAACAAA	TAAAAAACTG	AAAAAAGAAT	ATTCTCTCTC	ATTATTGGGA	TTTGCCACAT	8280
CAATATGGTG	TAAATTAGAA	TCGAAATGAT	AGATAAAAAT	ATTTTTTCAA	CTAGAGTATC	8340
TCCAACATATC	CTTCCAATCT	TTGAGGGAGT	AGTACAAGCA	TTTACAATAT	TTTTTGTAGC	8400
TGATATCATG	AAACCAAAAT	CAATCACCAG	TTGAACATAA	GCTATTAACG	CTTTAACATA	8460
AATAACCATT	CCATACGCGT	CTAGCGAAAG	CACCCTTGTC	AAATACGGGA	GTGTTAATAA	8520
AGGAAATAGT	AATTTAACAA	TATTCAGAAT	ATAGAGAGAA	CTTGTATTTT	TTATAAATGA	8580
AATTCTATCA	ACTTTCACGA	ACTAGTCCTT	CCAAAAAAG	ATCTAAATAG	TCCAAACTAC	8640
TTCTCGCTTT	CAACACCAAT	TCTGAAGGTA	TTGTTATCGG	TTTTAGATGA	AAAGTTTCAA	8700
GTTTCTTTAC	AATACTATTA	ACACTTGAAT	CAAATAAAGA	TTCACAACGT	TGTAACCTCTC	8760
CAATTGCTCC	ATAATAACGT	GCTGTTTTTT	CTGGATGGCA	TGCAATGGCA	ATCACAGATT	8820
TATTAAAACA	TGTTGCCACT	ACCCCAACAT	GTAATTTACA	AGTTAAAACC	ACATCTACCA	8880
TTTTCAACAA	TGATGTCATT	TCTGCAGGAG	AATGATACTT	GAATTGAAAA	CAATCCTCAG	8940
TTCTAACTAA	TTTTCTAAAT	TCCTGATAAT	AAGCATCTTC	ATAAGGTAGA	ATGGAATCCG	9000
AAGTTACTAC	AACATAATAG	TTAGGATTGT	TTTCTAGAAA	AAGACTAATT	GATTCCGCAA	9060
ATTTTTCAAG	AGCTTTTTTG	GAATGATTAT	AGTGAACAAG	AATTATCTTC	TTATCTTTAG	9120
CTTCTCTTTT	CAATTGACAC	AGCTGCTCTG	TTTTTCTTTC	TCTTAATTTA	CTTGAAATAA	9180
TTAAATCAAA	GGTTTCATGC	ACTGGAGCCG	AAGGCGACAA	ATGCTTCAAA	GAATCAAATG	9240

ATTCTCGATC	ACGAACTGTA	ATAAATTGAG	CATGATTAAT	AATTCTCTTT	ATACCATAAT	9300
TCATCAAAGA	ATCGTTATTA	GGCCCTGCAC	CAATACCTAA	TACTCCTATA	GGCTTTTAA	9360
AATATGAAGC	CCAAATTCCC	AAAGGTAAAA	ATCGTTTAAA	TTGGATTAAA	TTATCACGAA	9420
AACGTGCATT	ATGCCCTTCC	CCAAAATATC	CTCCCGGGAT	ATACAAAATA	GCATCTGCTT	9480
GTTTTTTAGT	AAAACCTTGT	TTTTGGCGAT	ATTCTTTCAA	GTACATTGTA	AAGAAATCTG	9540
ATGGATTATA	AAAAGAAACT	TCATATCCTT	TAGATTCTAA	TAAATCATAG	ACAATCTCAC	9600
CGTAAAGATA	ATCACCGTAA	TTACTTGAAC	CATAATCCGT	TGCACCATGT	AACATAATTT	9660
TTTTTCACCAC	TATTTTTTCA	ACCTCCTAAA	AATAAATATC	ATAATCAAAC	TATACATAAT	9720
AGGACGATAA	ACATCTATTG	AACTACTTCT	CACTAAAAGC	AATAGTTGAG	AAATTACCGA	9780
AAAATAAATA	ACTTTTGAGA	TTTTACTTGT	TTGAAAAGCT	CTGAAATTTA	ATCGCCATCC	9840
ACTAAATATT	CCCAAACAA	AACTCCAAAA	AACACCACCA	TAGTAACCAA	AGTTCCAAAA	9900
TAATTCTTCC	ACAAAAGAAG	AGCCTACAGG	TAACCCCAAA	AATTTATTAA	TAACAACCGT	9960
CGCTGATGCT	TTATCAAAAA	AATCACCAAC	TAACCATCCA	ATAGGAAAAA	TTGATAGGAT	10020
AGTGCGTAGA	AATGTCATCC	CATATTCATA	TGGAATGCTA	CTAGGCACAA	CAGTTACAGC	10080
AGAAGCTACT	GTTAGGCTGG	TCAGTCCCGA	CTCTGAAAAT	ACTTCCCCTA	GTATATTCTT	10140
TACAAAATCT	AATGAAGAAA	AGGAATCAAA	TAAGTATATA	CCTATAGTAT	TCAAGTCGAA	10200
ACGGTGCCCC	CTAATAACAA	CTAATACATT	TAATAGAAAT	ACAGTTACTA	TTAAAAATAC	10260
AAGTACTCTT	TTCTTCGAAA	AAGTAATCCC	TAAAGATTGT	GTGTATACTA	AAACCAACGC	10320
CAAGATTGAA	AACACCTGGA	TTTTACGACT	TCCTGTTAGG	ATCATTATCA	AAATTAGGTA	10380
AAACAACATT	ACCCAAAAAA	TAGTACGCTT	TATAACTCGG	GACAGCTTAT	CTGAATAAAA	10440
CAAGGAGAAC	ACACCAGGAA	GCATAAGTAC	TCCTAAATCA	TCTATTATTC	CTGAACTAGC	10500
TGCCTCTGAA	TATGCTGAAT	AGCTATTTCG	CGCTCTAACT	GCTAGTACTG	TTTTAGAATC	10560
AGTTATTACC	CTAGAAATAA	AGCCCACTCC	TGTTAAAATC	CTACCCGCAT	TGTACAAAAT	10620
TTTCTCTTCA	TTTTCCTGAT	AATTTTGTAC	TTCTGAATGA	TAATGTACCT	TTCCATCACT	10680
ATAAAAAAAT	AAATAGCCTA	CAGAATAACA	AAACAAAATC	CAAATTATAA	AAATATATGA	10740
ATGAAATAAT	TCTTCATTAT	TATAGAAGTT	ACTAGGGCTC	CACAGCAGAG	TTGTTTGAAA	10800
CCCCATATAC	TCATTGAAAA	TTAATCCAAA	CATAAAAAAA	TAAGATAAAA	TCAGATACCA	10860
TACAGAAAAA	TCATATATAC	TAACTTTTTG	TAAAATAAAA	CCAGTAATTT	GAAAAATAAT	10920
TAGAAAGCAA	ACCCATATAA	ATATAGACGG	AACATAATTA	GATATAAGAA	AACCATTATT	10980

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CCAATTATCG	AGAGTCCAGA	ACAAGTAACA	GAAAGCAAAT	ATAAACTTA	ATGTCACTAG	11040
TGTCACTCTA	CAAATATACT	TTGTCTGCAT	CTATATCTCC	TTTATTACAC	ACATTTCTTG	11100
ATAACGATTC	AATAATTTAC	TAGCTTGATA	ACAAATATCA	TAGAGTCCAT	CTGTCATACT	11160
GTTATTTATT	TCAAACGAT	TGCATTCCTC	AGATGTTAAA	GACAGTACTT	TATCTTTCCA	11220
TAGCAACACA	GACTCTTCGT	TGATAGGTAA	GTAACATAATG	TTTTTGGTCA	CATCTACTTC	11280
TTGCGTCACT	GTATCTGACG	ATAAAATTTG	TAATCCCGAT	GCCTGAGCCT	CTACTAGAGA	11340
AACAGGCAAC	CCCTCATATT	TAGACGGAAG	CAAAAAACA	TCCATCGCAG	ATAATAAATC	11400
AGAAATATCA	GTCCTTCTCC	CTAAAAATAG	CACATATGGG	GTCAGATTTA	GTTCTAAAGC	11460
TTTCTGTTTT	AATTTCTGCT	CATCCTCACC	ATTACCAACT	AGGAGTAAAA	TAACATTTGG	11520
TTTGATTAAA	ATGAGTTCTT	TTAAAACGTT	AAATAAATAA	CTTTGGTTTT	TTTGATCTGA	11580
TAGGCGAGCT	ATATTTCTTA	ATACGAACTT	ATTTGACACA	TCTAATTCTC	TACGACATTT	11640
TTCTCTAACA	TCTGACAAAA	ATTGATACTT	TTTCAAATCA	ATTGCATTAA	AAATAATTTT	11700
AATTTTTCCG	TCTTTATACG	CTTTCTCTCC	ATATAACCAC	TTAGCCGAAT	CTTCCCCACA	11760
TGCAAACCAA	TGAGTTGCTA	AGATTTTTTAC	CAAATTGTT	ACTAATTTAC	GCAATACTTT	11820
TTGAAACTG	TTTTCTGTTA	CATAAGCCAT	ATGACTATGA	ATAATTCTAA	TTTTACAACC	11880
AATTATTTTA	GATAAGATCA	GACCAATTGC	AGATTTATAG	CCATGGCAAT	GAACATATATC	11940
ATAATCTCCT	TTCTTTATTA	TTCTAGCAAG	AGAGAGAAAC	TGATGTAGAG	GCTTTTTCTT	12000
TAATAGAGGC	ACATGATAAA	CCTTTGCACC	CAATTCCTTC	ATTTTATCCT	CTAAAAATCC	12060
TTGTTCTTTT	CCAGGCACAA	TAAAATCAAA	TTGAATTTTT	TTTCTATCAA	TGTGAGAATA	12120
ATAGTTGAAT	AGAAAACCTT	CTACTCCACC	ACTATCTAGT	GTTGTAAATA	GATGTAATAC	12180
TTTAATCATT	CTTCTTCCTT	AAGCTTAAGA	TTGCTTCTC	TAATTCCTATT	TCTGTTTTTT	12240
GTTTTTCTAA	ACTAATTCCTG	TCCATGAAGT	TATCACAATT	CTTAATTAGC	TGTTTCCTGT	12300
CAAGGTTTTG	AATATACAAA	GCCAAACAAT	CTTTTCCGA	TTCATCCTTC	ATAGGTAAAA	12360
CGAAACCAAA	ACCATTCCTT	ATTGACACTT	TTTCCATATA	AGTATCTTCA	CAAACTAAAA	12420
TAGGTTTATA	CAACAATGCA	GCAAAGTAGA	GTTTATTAGA	CAAAGCATAG	TCTAGTAAGG	12480
GAGTGTGATT	CCCGTATAAA	TTCAAAACAA	CATCTGTATT	CTTATAAAAA	GACATGGTAT	12540
CTTTAGGCTG	GAATGTGTCC	ACCAAGTTAA	CATTGCTGAT	ATTTTTTTCT	TGACAAAATT	12600
CCCTTAATTC	TCCTGCATTA	GTACCTATAA	AATTCAACTG	AAATCGACTG	TCATTTGCAA	12660
AAAAATCGAT	TATTTTTTTA	TTTTGTCTT	GAAAACGAAT	TAAACCAATG	TAGGAAAGTT	12720
GAATTGGAAA	CGTACTATTA	TTTTTTAACT	GCTTTACCTC	GTTTAATTCT	ATCATATTGG	12780

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GTAGGTTATG	GGTAGTAAAA	TACTCTCCCA	TTGGTAAAAA	AAATTTATAG	CCGTCTGAAG	12840
AAACGATATT	CATTAAAGAA	TTTTTCACCA	ATTGTTTCTG	AACCAAACGA	TAAACCAAAA	12900
ATTTTTCATA	ACTGTAATCA	CGAATATCAT	AAATATATCT	ATTTTAAAT	GAAAAGAGAA	12960
GAAAATCTAC	TAAAATGAAA	GACACAATAC	TATGTAACGG	CAATATCATA	TCATAATCAT	13020
TTTCTTTTAG	CTTCTTTTAA	ATTTCTTTTC	TGAATTTTAC	ATAACCTAAT	ATCTTACTTA	13080
ATTTTCCTTT	ACCAGAAAAA	GAAATACGAT	AGTAGTTTGT	TTTTGTAATA	ATCTCGTTAA	13140
TATCTTATC	CCAATATATA	ACATCGTAAC	TAATAGACAG	TTTCTTCAAT	AATTCTTTAT	13200
AAAAATTGAA	GTAAGGAGTT	AGATATATAT	TATCAGATAG	TATAAACAGT	ACTCTCATTA	13260
AATTATTCTT	TCTTACTTTC	CCTCTCTAAA	CATGTCTCCA	GTTCGAGCAT	AACTGCTCT	13320
TTTGAAAAGT	GATTTTCATA	GTAACAACGA	GCTTTCTTTC	CTAACTCTCT	TTGTCTCTTA	13380
ATAGATAACA	TACTAAATTT	ACAAATATTT	TTTGCCAATT	GTTTTACATC	TCGTTCGGGA	13440
CTAACATATC	CACAATTTGC	TTCTTCTACA	ATTATTTTAG	CATCTCCTGA	AATTGCACCT	13500
ATAATTGGTT	TGCCTGCCGC	CATATAAGAA	TGTACCTTCC	CAGGTATAGT	ACGAGAAACT	13560
ATCGAGTCTC	CTATTAAAGA	AACTAACATA	GCATCTGATT	TTTTATAGAA	GGATGGCATT	13620
TCCTCCAAAG	AACGTCTTCC	ATAGAAGGAA	ATATTCCTTA	ACTCCAATTC	ATGAGCTAAT	13680
GCTTTCATGC	TTAACAATTC	CGTACCATCT	CCAACAAAAT	GAAAATGAAT	TTTCTTGGGT	13740
AAATTGGTAT	TCTTCTCTAT	CAAACTGGCA	GCTTTCAAAA	TAGTTTCCAA	ATTTTGTGCT	13800
TTGCCAATAT	TACCAGCAAA	AGTTAGGTCA	ACACTTTCTT	TATTAACAT	AGATTCATCA	13860
GGGATAAAAA	GATCTTCTGC	ATATTGTGGC	AAATATGTAA	TCTTTTGTTT	GGATATGTCA	13920
AATTGCTTCA	CAAAATAATT	TTTAAATGAT	GGACTAGTGA	CAAAATATATA	ATCACTAGCT	13980
CGGTAAACTT	TTTTTGAGAT	AAATTTAAAC	AGCTTGAAAA	TCAAGCCATC	TTGTTTCACT	14040
CCACCTACGG	TTAAACTATC	TGGCCAAACA	TCCATACAAT	ATAGAAACAT	CGGTTTCTTA	14100
TATTTTTTTT	TATAAGCCAT	ACCAGCCCAT	GCCATCATAA	CTGGAGACAA	TTGGTTAACG	14160
AATACACAGT	CAAAATTCGA	TCCATCTTTC	GTTTTATACC	TCCCCAATAA	AACTCCTAAA	14220
GTAGAACTAA	TTGCAAAGCT	AAAATAATTC	AACAATCGAA	ATACAACACT	TTTTTTTCTA	14280
GGGATTGTAT	AAGAACGATA	TATCGTAACA	CCTTCTATAA	TCTCACGTCT	TTTTTTTATTA	14340
TGACGATAAT	CTGCATATAT	CTTCCCTTCA	GGGTAATTAG	GAATCCCAGC	CAAAACAGAG	14400
ACTTCATGCC	CTTTTCGAAC	TAAATCTTCA	CAAAATATCTG	ACAACCTGAA	TGGTTCCTGGC	14460
TTATAATGTT	GGCAAACAAA	TAGTATTTTC	ATTGTCCAAT	TTAACTTTCT	TTCTTACCAC	14520

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TACCCCTCTAC	AATACCTTTT	CGTTTCAGTA	CGTAAGGTAT	TGTCTTAACT	ATACATCTAA	14580
TATCCATTAT	CAAAGACAGA	TGTTTAACAT	AGTAGCCATC	TAACTCCGTC	TTCATCTCAA	14640
CAGACAAAGT	ATCACGCCCC	TTAATTTGTG	CCCATCCAGT	TAACCCCTGGC	AAGATATCAT	14700
TTGCTCCATA	CTTATCTCTC	TCTGCAATCA	AATCTAGTTC	ATTTATACCC	GCTGGTCTAG	14760
GACCTACAAT	ACTCATATTA	CCAACAAGAA	TATTAAACAA	TTGTGGTAGT	TCATCCAAAG	14820
ATGTTTTTCG	CAAGAAAGCC	CCTACTTTTG	TAATCTATTG	CTCTGGATTA	TATAAGTTTC	14880
GAGGCGCCAC	ATTTTATAGG	GCATCTATTT	TCATAGACCT	AAATTTCAAA	ATATAGAAGT	14940
ATTCTTTATG	AATACCAAAG	CGTTTTTGCT	TAAATATAAC	CGGACCTTCT	GAATCAAGTT	15000
TAATCGCAAT	TGCAATTATC	ATAAAAACCG	GACACAATAT	TATTATCCCT	ATTAAAGATA	15060
ATAATATATC	ACCTAATCGT	TTTATTATAC	CGTACATAAA	CAACCTCCAA	CTATAAATTC	15120
TATTTCCATT	TTTCATTCTA	TTTCCATTG	ACAAATTAAA	TCAGGCAGTA	CATGCAACTA	15180
CAGAACTCA	ATATATATTT	GGTCACTCAA	TGATTTTCAG	AAATATAATT	CTTTTATCCT	15240
CTACGTCAGA	TAAAACCTTT	CTCCATCTAA	ACAAAATTTA	TTTGTTTCAG	TAATATATGA	15300
GTTCTCAATA	ATGAATTAGA	AGGTCCAGTT	CAATTATTCT	TCCAAATAGA	CCGAATATTA	15360
TTTGAAGACA	TATCGGTTTC	TGAAATTGCA	ATCAGTACAT	AAGCTAATAA	ACTGATAAGT	15420
ATGCTCTGTA	AGAATGCCAG	AGTTATATTG	TAGTCCCCTT	CCATACTATA	TTCATTTTAT	15480
TTTTTACCAT	AATTTCCATA	GGAACCGTAA	ACTCCATACT	TATTAACCGA	GATATCCAAT	15540
TTATTTAAAA	CAACTCCTAG	GAACAGTTTC	CCTGTTTGTT	TTAATTGTTG	TTTCGCTTTT	15600
TGGATATCAC	GTTTATTCGC	CTCACCTGTT	GCTGTTACCA	AGATGGACGC	ATCACACTTT	15660
TGAGTGATAA	TTGCCGCATC	AATAACAATT	CCAATAGGCG	GTGTATCAAT	AATGATATAA	15720
TCAAAATATT	TACGCAATGT	TTCAATCATA	TCATTAAAAAT	TTTTACTTTG	TAACAAGGCT	15780
GTAGGGTTTG	GTGATACAGA	TCCCGATTGA	ACTACAAATA	AATTTTCAAT	ATTTGTATCA	15840
CATAAACCGT	GAGATAAATC	AGCTGTCCCA	GATAAAAATT	CTGTTAGCCC	TGTAATTTTT	15900
TCACGAGATT	TAAAAACTCC	TAACATAACT	GAATTTTCGAG	TATCGCCATC	GATCAAAAGA	15960
GTTTTATAGC	CTGCACGCGC	AAACGACCAT	GCTATATTTA	TGGAAGTAGT	TGTTTTTCCT	16020
TCCCCAGGGT	TAACAGAAGT	AACGGAAATT	ACTTTTAGTT	TATCTCCGCT	CAACTGTATA	16080
TTTGTACACA	AGGCATTGTA	ATATTCTTCT	GCCTTCTTAA	TGAACTCCAG	TTTTTTTTGT	16140
GCTATTTCTA	ATGTCGGCAT	CCTTCTCTCC	TATTTCAACT	TACCCAAGTT	TGGCACAACT	16200
CCCAAAGTG	TCATCTGCAA	TGTATTTTCG	ATATCTTCCG	GACGTTTCAC	ACGAGTATCC	16260
AAAAGTTCAA	GATGAAGAAC	TATAACACTA	GTTCCAATCA	CCCCTGCCAA	AAAACCAATT	16320

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AGTGTATTGC	GTTTAATATT	TGGCGAAGAC	GGGGATATCG	CCGGCCTTGC	CTCCTCCAGT	16380
GTTGTCACGT	CAGAAACACG	AGTAATACTG	ATAATTTTTT	GAGCAGCTAC	TTCTCTCAAA	16440
GAGTTAGCGA	TACGGCTTGC	CTCTTCAGGA	ACTCGATCAT	TAACTGAAAT	AGAGACAATA	16500
CGGGTATCAA	CTGGTACTGT	CACTTTAATT	TTATTAGCCA	AACCTTTTGG	CGTCAAATCT	16560
AGTTTCAAAT	CAGAAACAAC	TTCTCCAAA	ACATCCTGCG	AAAGGATAAT	CTCACGGTAG	16620
TCTTTTACCA	GATAAGTTCC	TGCCTGCAAA	TCCTGATTTG	TCAACCCCGG	CTTGTCTCCT	16680
TGATTGCGAT	TCACTACGTA	AATTCGCGTG	GTACTCGTAT	ATTCTGGCTT	AACAATAAAA	16740
GTGCTATATG	CAAAAGCCCC	CGCACCTGTC	ACAAGTGCCA	CTATTAAAAT	CATTAGCTTG	16800
CGTTTCCACA	AGCTTTTAAC	TAATTGAAAT	ACATCGATTT	CTATCGTATT	TTGTTCTTTC	16860
ATCATTTCTC	CTAAATTAGT	TGATCCATTA	CAATTTTTCG	AGGATTGTCT	ATAAAAAGTT	16920
CCTGAGCCTT	CGCTTCTCCG	TATTTTGGG	TAACAAGGTC	ATATGCTTCT	GCCATATGAG	16980
GAGGTCTACC	GTCTAGATTG	TGCATATCAC	TTGCAATGAC	ATGAACCAA	TCCTGCTCTA	17040
AAAAATACTG	AGCTCTTTTT	TTCATGAATT	TATAACGTTT	GCCAAAAAGT	TTGGGTTTGA	17100
GGACATGTGA	ACTATTTACT	TGCGTGTAAC	AGCCCATATC	GATCAGTTCT	CGAACGCGTT	17160
TTTCATTATT	TTCAAGAGCA	TCATAGCGCT	CAATGTGGGC	AATGACTGGA	GTAATTCCCA	17220
ACATCAAGAT	CTTGCTCAAG	GCGCTATGAA	TATCGCGATA	AGGAGTGTTT	ATACTAAACT	17280
CTATCAAGGC	ATAACGACTA	TCATTGAGGG	TCGGAATCCG	CTTTTTCCTC	AGCTTATCCA	17340
GAACATCTGG	TGTGTAATAA	ATTTAGCCCC	CGTAAGCAAT	GACCAAGTCA	CTCGCCACTT	17400
CCTTAGCTAT	TTCCCGAACC	TGAAGAAAGT	TTTCTGCTAT	CTTCTCTTCC	GGAGTTTCAA	17460
ACATGCCCTT	GCGACGGTGA	GAGGTAGAAA	CAATGGTTTC	CACCCCCTGT	CTGTAGGATT	17520
CTGCCAAGAG	AGCCTTGCTT	TCCTCTCTTG	ACTTGGGACC	GTCATCTACA	TCAAAAACGA	17580
TATGCGAATG	GATGTCTATC	ATTTATCTTA	CCCTCCATCA	CATCCTGTAT	AGCTGCTTTA	17640
ACTACAGCTA	AACTACTATC	ATCTATTTCC	ATCACATAGA	GGTTACTGTC	TGGCATTGCA	17700
TAAGAAGGAA	GATCCATCCG	ACCTGTCCCT	TTTAAATCTT	GAGAATTTAC	TTTATAATTC	17760
CCTCCACTTT	CTAACTGAGC	ATTGACCAAA	TTTATCATGG	TCTCAAGTGG	CATATTTGTT	17820
TGGATAGAAT	CTTGCAAGCT	ATTAATGATC	GTACTATAAT	TTTTTCAGCAC	TTCGGTTGAC	17880
GTTAATTTTT	GAAGGATAGC	CACAATCACC	TTTTGTTGAT	GGCGCCCGCG	GTCACGATCG	17940
CCATCTGCTA	GGGAGTAGCG	CTCACGAACA	AAACCGAGAG	CCTGTTCTGA	ATCAAGATGA	18000
ACATTGCCTG	CAGGGTAATA	CTTTCCATTC	GTATGGGCAG	TAAATTCTTG	ATCATTATAA	18060

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ACATCAATTC	CACCCAACAA	ATCAATCAAT	TTCAAAAACG	AAGTGAAGTT	CAATCGCACA	18120
TAGTAATTGA	TATCCACTCC	ATAGAGATTT	TCTAAGGTGT	GAATGGACGA	ATCAACTCCA	18180
TAAATGCCCCG	CATGAGTCAA	TTTATCTTTT	TGATTATTTT	CACCATCTGC	GATTGGTACA	18240
TAGGCATCAC	GTGGCGTTGT	GGTCAAGAGG	ATTTTCTTGG	TATCTCGATT	GACAGTCATC	18300
AGGATGTTGA	CATCTGATCG	CGACACCGAA	CTAATAGGAC	CATAGGTGTC	AATTCCACTA	18360
ACATAGATAT	TGAAAGACTG	ACTCTTAGAC	GTCTTAGGAG	CTTCTACTTT	TTTAGTGAAT	18420
CCCTTAGTAT	AAATCTTTTT	TATCTTCGAT	GCGTAGTCTG	GATACTCTGA	CTCGATGATG	18480
TTTTCAAAGA	CACTATTTAG	GACAATGGCC	TTAGTCTCCC	CTGCAATCAA	ACTCTTGTA	18540
GCTGCCAAGT	AAGACGAACT	CTGGTTGACC	GTCAAATCGG	TATTCTGACT	TGACTTGATA	18600
TCAGCTAGTA	ATTTCTGAAT	ATTTTCATTA	TTAGTCCCAG	TCGGTGCTGT	CACACTCGTC	18660
AGTTGCGTAA	CATTTTCGAT	CTCACTATCT	GCTAAAACAG	CGACACTGAT	TGAATATTCT	18720
GAGTAATTAG	AAGTCGCATT	TAAACGATTG	GTCAGTCCAA	CAAAC TGCTG	TACTGCAAAG	18780
AGCGACACAG	AGCTGACAAG	GATAGAGAAC	ACCAACAGAA	AAATAGTAAA	CTTTTCAGCT	18840
TTTTTATAGA	TAATCAAGAG	TAGCCCTACC	AAGGCAACTA	GTAGGACTAA	CGCAGTTACC	18900
ACTAGATTAA	GATATCTAAA	AGCAAGGATA	TTGTACTTAA	AGATTAAGAA	CAATAAAAAA	18960
CAAAC TAACA	ATAAATAAAT	AGTCAGCAAA	ACTATATTAA	CACTTCGCTT	CACTTTCTGT	19020
GAACGTGATT	TTTTAAAACG	TCTACTCATG	ATTAATACCT	ATACATTGAA	CATTATACGA	19080
TTATATCACT	TTTTTACGGT	AATGTCTACA	CCTTTATTTT	TACTATCTGC	ATCTTTAAGT	19140
ATCTTAGTAG	ACTTCCCGCG	AAACAAAAAT	ATAGTAAAAT	GAAATAAGAA	CAGAACAAAT	19200
CGTTCAGGAC	AGTCAAATCG	ATTTCTAACA	ATGTTTTAGA	AGCAGAGGTG		19250

(2) INFORMATION FOR SEQ ID NO: 36:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 21706 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 36:

AAAGTTGAAA	GACTGCTAGC	TGTTTTTGAT	ACCAATCGTT	TCCAAC TACA	GAGCAAACAG	60
TATACAAAGT	TTGTTTTTGG	ATGTAAGCTT	CTTGATGGAC	AATTCCAAGA	AAATCAAGAA	120
ATTGCTGACC	TTCAATTTTT	TGCCATTGAC	CAACTGCCGA	ACTTATCTGA	AAAACGCATT	180
ACCAAGGAGC	AAATAGAGCT	TCTTTGGCAG	GTTTATCAAG	GTCATAGGGG	GCAATATCTT	240

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GACTAAGAAG ATGATTATCG TATTTCTAAA TCCATTTTTA ACAACTAGCA TGGTATAATA	300
ATATGCAGGA AAATTTTGAA TTATGAGGAA GACTAGATGA ATTTATGGGA TATTTTCTTT	360
ACGACTCAGG CAACCGAGCC GCCCAAATTT GACCTTTTTT GGTATGTTAG CCTATTTACG	420
CTCTTAGCCT TAACCTTTTA TACAGCCCAT CGCTATCGTG AAAAGAAGGT TTACCAACGA	480
TTTTTCCAAA TCTTGCAGAC TGTTCAAGTA ATCCTTCTTT ATGGTTGGTA CTGGGTCAAT	540
CATATGCCAC TGTCAGAAAG CCTACCCTTT TACCATTGCC GTATGGCTAT GTTTGTGGTA	600
CTCTTGCTTC CTGGTCAATC CAAATATAAA CAATACTTTG CATTATTGGG AACATTTGGG	660
ACATTAGCAG CCTTTGTTTA TCCAGTGCCA GATGCTTACC CTTTCCACA TATCACCATT	720
CTATCCTTTA TCTTTGGTCA TTTAGCACTC TTGGGGAACCT CTCTAGTTTA TCTATTGAGA	780
CAGTATAATG CGCGATTGCT GGATGTGAAG GGAATTTTTC TCATGACCTT TGCCCTAAAT	840
GCCTTGATTT TTGTGGTCAA TTTGGTGACA GGTGGCGATT ACGGATTTTT GACAAAACCG	900
CCATTGGTTG GGGATCACGG TCTAGTAGCT AATTATTTAC TTGTTTCAAT TGTGCTGGTA	960
GCTACTATCA GTTTGACTAA GAAAATCTTA GAATTCCTTT TAGCTCAAGA AGCAGAAAAA	1020
ATGATTGCAA AGGAAGCTTA ACACAGAGCT TTCTTTTTTG CTCTTAGAGA GTTTTACAA	1080
GCAGCTTATA AAATAAGAAT TTCTGAATAG ACAAACTCAA AAAATGGCTG GGAAATTTAG	1140
GAAAAAAGCA AGCACGATTA AATTTTTTGT GTTATAATAT TTTGTGAATA GCTATGCCTA	1200
TGTTTAGCTA TGGAATAATA CGAAGTGCGA AACTTGGAAG ATAGAGAGGA AGCGATGTAA	1260
TGGCTAGAGA AGGCTTTTTT ACAGGTCTAG ATATTGGAAC AAGCTCTGTC AAGGTGCTTG	1320
TGGCCGAGCA GAGAAATGGT GAATTAAATG TAATTGGCGT GAGTAATGCC AAAAGTAAAG	1380
GTGTAAAGGA TGGAATTATT GTTGATATTG ATGCAGCAGC AACTGCTATC AAGTCAGCCA	1440
TTTCCAAGC GGAAGAAAAG GCAGGCATTT CGATTAAATC AGTGAATGTC GGCTTGCCTG	1500
GTAATCTTTT GCAGGTAGAA CCAACTCAGG GGATGATTCC AGTAACATCT GATACTAAGG	1560
AAATTACGGA TCAAGATGTT GAAAATGTTG TCAAATCAGC TTTGACAAAG AGTATGACAC	1620
CTGACCGTGA AGTCATTACC TTTATTCCTG AAGAATTTAT TGTGGATGGT TTCCAAGGGA	1680
TTCGTGACCC ACGTGGCATG ATGGGGGTTT GCCTTGAAAT GCGTGGTTTG CTTTATACAG	1740
GACCTCGTAC TATCTTGCAC AATTTGCGTA AGACGGTTGA GCGTGCAGGT GTTCAGGTTG	1800
AAAATGTTAT CATTTACCA CTAGCAATGG TTCAGTCTGT TTTGAACGAA GGGGAACGTG	1860
AATTTGGTGC TACAGTGATT GATATGGGGG CAGGTCAAAC GACTGTCGCT ACAATCCGTA	1920
ATCAAGAACT CCAGTTCACA CATATTCTCC AAGAAGGTGG AGATTATGTA ACTAAAGATA	1980

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TCTCCAAGGT	TTTGAAAACC	TCTCGCAAAT	TAGCGGAAGG	CTTGAAACTG	AATTACGGGG	2040
AAGCCTATCC	GCCTCTTGCA	AGCAAAGAAA	CCTTCCAAGT	AGAGGTTATT	GGAGAAGTAG	2100
AAGCAGTCGA	AGTGACGGAA	GCCTACTTGT	CAGAAATTAT	TTCTGCACGA	ATCAAGCACA	2160
TCCTTGAACA	AATCAAGCAA	GAATTAGATA	GAAGGCGTCT	ATTGGACCTC	CCTGGTGGTA	2220
TTGTCTTAAT	CGGTGGGAAT	GCCATTTTAC	CAGGTATGGT	TGAGCTTGCT	CAGGAAGTCT	2280
TTGGCGTCCG	TGTCAAGCTT	TATGTTCCAA	ATCAAGTTGG	TATCCGTAAT	CCAGCCTTTG	2340
CGCATGTGAT	TAGTTTATCA	GAATTTGCGG	GTCAATTAAC	AGAAGTTAAT	CTTTTGGCTC	2400
AGGGAGCGAT	AAAAGGTGAG	AATGACTTAA	GTCATCAGCC	AATTAGTTTT	GGTGGGATGC	2460
TGCAAAAAAC	AGCTCAGTTT	GTACAATCAA	CGCCTGTTCA	ACCAGCTCCT	GCTCCAGAAG	2520
TAGAGCCGGT	GGCGCCTACA	GAACCAATGG	CGGATTTCCA	ACAAGCTTCA	CAAAATAAAC	2580
CGAAATTAGC	AGATCGTTTC	CGTGGATTGA	TCGGAAGCAT	GTTTGACGAA	TAAAGAGGAA	2640
AAATAAATTA	TGACATTTTC	ATTTGATACA	GCTGCTGCTC	AAGGGGCAGT	GATTAAAGTA	2700
ATTGGTGTCG	GTGGAGGTGG	TGGCAATGCC	ATCAACCGTA	TGGTCGACGA	AGGTGTTACA	2760
GGCGTAGAAT	TTATCGCAGC	AAACACAGAT	GTACAAGCAT	TGAGTAGTAC	AAAAGCTGAG	2820
ACTGTTATTC	AGTTGGGACC	TAAATTGACT	CGTGGTTTGG	GTGCAGGAGG	TCAACCTGAG	2880
GTTGGTCGTA	AAGCCGCTGA	AGAAAGCGAA	GAAACACTGA	CGGAAGCTAT	TAGTGGTGCC	2940
GATATGGTCT	TCATCACTGC	TGGTATGGGA	GGAGGCTCTG	GAAGTGGAGC	TGCTCCTGTT	3000
ATTGCTCGTA	TCGCCAAAGA	TTTAGGTGCG	CTTACAGTTG	GTGTTGTAAC	ACGTCCCTTT	3060
GGTTTTGAAG	GAAGTAAGCG	TGGACAATTT	GCTGTAGAAG	GAATCAATCA	ACTTCGTGAG	3120
CATGTAGACA	CTCTATTGAT	TATCTCAAAC	AACAATTTGC	TTGAAATTGT	TGATAAGAAA	3180
ACACCGCTTT	TGGAGGCTCT	TAGCGAAGCG	GATAACGTTT	TTCGTCAAGG	TGTTCAAGGG	3240
ATTACCGATT	TGATTACCAA	TCCAGGATTG	ATTAACCTTG	ACTTTGCCGA	TGTGAAAACG	3300
GTAATGGCAA	ACAAAGGGAA	TGCTCTTATG	GGTATTGGTA	TCGGTAGTGG	AGAAGAACC	3360
GTGGTAGAAG	CGGCACGTAA	GGCAATCTAT	TCACCACTTC	TTGAAACAAC	TATTGACGGT	3420
GCTGAGGATG	TTATCGTCAA	CGTTACTGGT	GGTCTTGACT	TAACCTTGAT	TGAGGCAGAA	3480
GAGGCTTCAC	AAATTGTGAA	CCAGGCAGCA	GGTCAAGGAG	TGAACATCTG	GCTCGGTACT	3540
TCAATTGATG	AAAGTATGCG	TGATGAAATT	CGTGTAACAG	TTGTTGCAAC	GGGTGTTTCG	3600
CAAGACCGCG	TAGAAAAGGT	TGTGGCTCCA	CAAGCTAGAT	CTGCTACTAA	CTACCGTGAG	3660
ACAGTGAAAC	CAGCTCATTC	ACATGGCTTT	GATCGTCATT	TTGATATGGC	AGAAACAGTT	3720
GAATTGCCAA	AACAAAATCC	ACGTCGTTTG	GAACCAACTC	AGGCATCTGC	TTTTGGTGAT	3780

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TGGGATCTTC	GCCGTGAATC	GATTGTTTCGT	ACAACAGATT	CAGTCGTTTC	TCCAGTCGAG	3840
CGCTTTGAAG	CCCCAATTTT	ACAAGATGAA	GATGAATTGG	ATACACCTCC	ATTTTTCAAA	3900
AATCGTTAAG	TAAATGAATG	TAAAAGAAAA	TACAGAACTT	GTTTTTCGAG	AAGTTGCAGA	3960
GGCTAGTCTG	AGTGCTCATC	GAGAGAGTGG	TTCGGTCTCT	GTCATTGCAG	TTACCAAGTA	4020
TGTAGATGTA	CCGACAGCGG	AAGCCTTGCT	TCCGCTAGGT	GTCCATCATA	TCGGTGAAAA	4080
TCGTGTAGAT	AAGTTTCTGG	AAAAATATGA	AGCTTTAAAA	GATCGAGATG	TGACTTGGCA	4140
TTTGATTGGT	ACCTTGCAAA	GACGTAAGGT	GAAAGATGTC	ATTCAATACG	TTGATTATTT	4200
CCATGCATTG	GACTCAGTAA	AGCTAGCAGG	GGAAATTCAA	AAAAGAAGTG	ACCGAGTCAT	4260
CAAGTGTTTC	CTTCAAGTAA	ATATTTCTAA	AGAAGAAAGC	AAACACGGTT	TTTCGAGAGA	4320
GGAAGTCTG	GAAATCTTGC	CAGAGTTAGC	CAGACTAGAT	AAGATTGAAT	ATGTTGGTTT	4380
AATGACGATG	GCACCTTTTG	AGGCTAGCAG	TGAGCAGTTG	AAAGAGATTT	TCAAGGCGGC	4440
CCAAGATTTA	CAAAGAGAAA	TTCAAGAGAA	ACAAATTCCA	AATATGCCTA	TGACCGAGTT	4500
AAGTATGGGA	ATGAGTCGTG	ATTATAAAGA	AGCGATTCAA	TTCCGGTTCCA	CTTTTGTTTCG	4560
TATAGGTACA	TCATTTTTTA	AGTAGGAGAG	AACCATGTCT	TTAAAAGATA	GATTCGATAG	4620
ATTTATAGAT	TATTTTACGG	AGGATGAGGA	TTCAAGTCTC	CCTTATGAAA	AAAGAGATGA	4680
GCCTGTGTTT	ACTTCAGTAA	ATTCTTCACA	GGAACCGGCT	CTCCCAATGA	ATCAACCTTC	4740
ACAGTCGGCT	GGCACAAAAG	AGAACAATAT	CACCAGACTT	CATGCAAGAC	AACAGGAATT	4800
GGCAAATCAG	AGTCAGCGTG	CAACGGATAA	GGTCATTATA	GATGTTTCGT	ATCCTAGAAA	4860
ATATGAGGAT	GCAACAGAAA	TTGTTGATTT	ATTGGCAGGA	AACGAAAGTA	TCTTGATTGA	4920
TTTTCAGTAT	ATGACAGAGG	TGCAGGCTCG	TCGTTGTTTG	GACTATTTGG	ATGGAGCTTG	4980
TCATGTTTTA	GCTGGAAATT	TGAAAAAGGT	AGCTTCTACC	ATGTATTTGT	TGACACCAGT	5040
GAACGTTATT	GTAAATGTTG	AAGATATCCG	TTTACCAGAT	GAAGATCAAC	AGGGTGAGTT	5100
CGGTTTTGAT	ATGAAGCGAA	ATAGAGTACG	ATAATGATTT	TTTTAATTCG	TATGATTTAT	5160
AATGCAGTGG	ATATTTACTC	CCTGATTTTG	GTAGCCTTCG	CTGTCATGTC	TTGGTTTCCA	5220
GGTGCCTACG	AATCCAGTTT	AGGTCGTTGG	ATTGTAGCGT	TGGTGAAACC	AGTGCTTGCT	5280
CCCTTGCAAC	GCCTGCCTTT	ACAGATAGCG	GGTCTTGATT	TATCTGTTTG	GGTTGCGATT	5340
GTTTTGGTTC	GATTTTTTAGG	AGAAAACCTA	GTGCGTTTTT	TGGCGATGAT	AGGATGAATA	5400
AAGGGATTTA	TCAGCATTTT	TCCATAGAAG	ATCGTCCATT	TCTTGACAAG	GGAATGGAAT	5460
GGATAAAGAA	GGTAGAAGAT	AGCTATGCTC	CTTTTTTAAC	TCCTTTTATC	AATCCTCATC	5520

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AGGAGAAGCT	ATTAAAGATT	TTGGCCAAAA	CCTATGGTCT	TGCTTGTAGC	AGTAGTGGGG	5580
AATTCGTCTC	GAGTGAGTAT	GTTCGAGTTT	TATTATACCC	AGATTATTTT	CAACCAGAGT	5640
TTTCAGATTT	TGAAATATCT	CTCCAGGAAA	TTGTGTATTC	CAATAAATTT	GAACATTTAA	5700
CGCATGCTAA	GATTTTAGGG	ACAGTCATCA	ATCAATTAGG	GATTGAACGG	AAACTTTTGT	5760
GAGATATCCT	AGTAGATGAA	GAACGGGCGC	AGATTATGAT	TAATCAGCAG	TTTCTTCTTC	5820
TCTTTCAAGA	TGGACTAAAG	AAAATTGGTC	GTATACCTGT	TTCGCTGGAG	GAACGTCCTT	5880
TCACCGAGAA	AATAGATAAG	CTAGAACAGT	ATCGAGAACT	GGATTTATCT	GTGTCTAGTT	5940
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TGATTGAAAA	GAAACTTGTC	CAAGTAAATT	ATCATGTGGT	AGACAAATCA	GATTACACTG	6060
TTCAAGTTGG	AGACTTGATT	AGTGTGAGAA	AATTTGGTCG	CTTGAGATTA	CTTCAAGATA	6120
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GAATAGAATG	CCAATTACAT	CATTAGAAAT	AAAGGACAAG	ACTTTTGGAA	CTCGATTGAG	6240
AGGTTTTGAT	CCAGAAGAAG	TCGATGAATT	TTTAGATATT	GTGGTTTCGT	ATTACGAAGA	6300
TCTTGTGCGT	GCGAATCATG	ATAAAAATTT	GCGTATTAAG	AGTTTAGAAG	AGCGTTTGTC	6360
TTACTTTGAT	GAAATAAAAG	ATTCATTGAG	CCAGTCTGTA	TTGATTGCTC	AGGATACAGC	6420
TGAGAGAGTG	AAACAGGCGG	CGCATGAACG	TTCAAACAAT	ATCATTCATC	AAGCAGAGCA	6480
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CTTCCACCAA	CGTCTCAAAT	CTACAATTGA	GAGTCAGTTG	GCTATTGTTG	AATCTTCAGA	6660
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TGATATGACA	CGTCAGTTCT	CTCAAGCAGA	AATGGCAGAA	TTACAAGCTC	GTATTGAGGT	6840
AGCCGATAAA	GAATTGTCTG	AATTTGAAGC	TCAGATTAAA	CAGGAAGTGG	AAGCTCCAAC	6900
TCCTGTAGTG	AGTCCTCAAG	TTGAAGAAGA	GCCTCTGCTC	ATCCAGTTGG	CCCAATGTAT	6960
GAAGAACCAG	AAGTAGCTCC	AATGCATCCG	ATAGGTCCAA	CACCAGCTAC	AGAAACTGTT	7020
GATTCAATAC	CGGGATTTGA	AGCACCGCAA	GAATCTGTTA	CAATTTTATA	AGAAATATTC	7080
TGAGAACAAT	ATCTTATCCT	TATATTTCCA	GCGAGCAGGA	GATGGTGTGA	GTCCTGTAAT	7140
CCCTATTGAT	AAGATTATCC	TCTCAAAAAC	TCAAGTCTGA	AGCTAGTAAG	ATTTGACGTT	7200
TCCCACGTTA	CGGGATAAGA	GGGAGAAAGA	CTAAATCTTT	TTCCGAATAA	AGGTGGTACC	7260
ACGATTTTCG	TCCTTTTTTG	AAGTCGTGGT	TTTTAATTTG	TTATTATTTA	TAAAGGAGAT	7320

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ACCATGAAAC	TCAAAGACAC	CCTTAATCTT	GGGAAACTG	AATTCCCAAT	GCGTGCAGGC	7380
CTTCCTACCA	AAGAGCCAGT	TTGGCAAAAG	GAATGGGAAG	ATGCAAAACT	TTATCAACGT	7440
CGTCAAGAAT	TGAACCAAGG	AAAACCTCAT	TTCACCTTGC	ATGATGGCCC	TCCATACGCT	7500
AACGGAAATA	TCCACGTTGG	ACATGCTATG	AACAAGATTT	CAAAAGATAT	CATTGTTCTG	7560
TCTAAGTCTA	TGTCAGGATT	TTACGCACCA	TTTATTCCTG	GTTGGGATAC	TCATGGTCTG	7620
CCAATCGAGC	AAGTCCTGTC	AAAACAAGGT	GTCAAACGTA	AAGAAATGGA	CTTGGTTGAG	7680
TACTTGAAAC	TTTGCCGTGA	GTACGCTCTT	TCTCAAGTAG	ATAAACAACG	TGAAGATTTT	7740
AAACGTTTGG	GTGTTTCTGG	TGACTGGGAA	AATCCATATG	TGACCTTGAC	TCCTGACTAT	7800
GAAGCAGCTC	AAATTCGTGT	ATTTGGTGAG	ATGGCTAATA	AGGGTTATAT	CTACCGTGGT	7860
GCTAAGCCAG	TTTACTGGTC	ATGGTCATCT	GAGTCAGCAC	TTGCTGAAGC	AGAGATTGAA	7920
TACCATGACT	TGGTTTCAAC	TTCCCTTTAC	TATGCCAACA	AGGTAAAAGA	TGGCAAAGGA	7980
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TCTCGTGGTT	TGACGGTTGG	TGCAGATATT	GATTACGTTT	TGGTTCAACC	TGCTGGTGAA	8100
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GCTGATGTTT	AAGTTTGGGA	AACTTACCGT	GGCCAAGAAC	TCAACCACAT	CGTAACAGAA	8220
CACCCATGGG	ATACAGCTGT	AGAAGAGTTG	GTAATTCTTG	GTGACCACGT	TACGACTGAC	8280
TCTGGTACAG	GTATTGTCCA	TACAGCCCCCT	GGTTTTGGTG	AGGACGATTA	CAATGTTGGT	8340
ATTGCTAATA	ATCTTGAAGT	CGCAGTGACT	GTTGATGAAC	GTGGTATCAT	GATGAAGAAT	8400
GCTGGTCCTG	AATTTGAAGG	TCAATTCTAT	GAAAAGGTAG	TTCCAACGTG	TATTGAAAAA	8460
CTTGGTAACC	TCCTTCTTGC	CCAAGAAGAA	ATCTCTCACT	CATATCCATT	TGACTGGCGT	8520
ACTAAGAAAC	CAATCATCTG	GCGTGCAGTT	CCACAATGGT	TTGCCTCAGT	TTCTAAATTC	8580
CGTCAAGAAA	TCTTGGACGA	AATTGAAAAA	GTGAAATTCC	ACTCAGAATG	GGGTAAAGTC	8640
CGTCTTTACA	ATATGATCCG	TGACCGTGGT	GACTGGGTTA	TCTCTCGTCA	ACGTGCTTGG	8700
GGTGTTCCAC	TTCTTATCTT	CTACGCTGAA	GATGGTACAG	CTATCATGGT	AGCTGAAACT	8760
ATTGAACACG	TAGCTCAACT	TTTTGAAGAA	TATGGTTCAA	GCATTTGGTG	GGAACGTGAT	8820
GCCAAAGACC	TCTTGCCAGA	AGGATTTACT	CATCCAGGTT	CACCAAACGG	CGAGTTCAAA	8880
AAAGAAACTG	ATATCATGGA	CGTTTGTTTT	GACTCAGGTT	CATCATGGAA	TGGAGTGGTG	8940
GTAAACCGTC	CTGAATTGAC	TTACCCAGCC	GACCTTTACC	TAGAAGGTTC	TGACCAATAC	9000
CGTGGTTGGT	TTAACTCATC	ACTTATCACA	TCTGTTGCCA	ACCATGGCGT	AGCACCTTAC	9060

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AAACAAATCT	TGTCACAAGG	TTTTGCCCTT	GATGGTAAAG	GTGAGAAGAT	GTCTAAATCT	9120
CTTGGAATA	CTATTGCTCC	AAGCGATGTT	GAAAAACAAT	TCGGTGCTGA	AATCTTGCGT	9180
CTCTGGGTAA	CAAGTGTTGA	CTCAAGCAAT	GACGTGCGTA	TCTCTATGGA	TATCTTGAGC	9240
CAAGTTTCTG	AAACTTACCG	TAAGATTTCGT	AACACTCTTC	GTTTCTTGAT	TGCCAATACA	9300
TCTGACTTTA	ACCCAGCTCA	AGATACAGTC	GCTTACGATG	AGCTTCGTTC	AGTTGATAAG	9360
TACATGACGA	TTCGCTTTAA	CCAGCTTGTC	AAGACCATTTC	GTGATGCCTA	TGCAGACTTT	9420
GAATTCTTGA	CGATCTACAA	GGCCTTGGTG	AACTTTATCA	ACGTTGACTT	GTCAGCCTTC	9480
TACCTTGATT	TTGCCAAAGA	TGTTGTTTAC	ATTGAAGGTG	CCAAATCACT	GGAACGCCGT	9540
CAAATGCAGA	CTGTCTTCTA	TGACATTCTT	GTCAAAATCA	CCAAACTCTT	GACACCAATC	9600
CTTCCTCACA	CTGCGGAAGA	AATCTGGTCA	TATCTTGAGT	TTGAAACAGA	AGACTTCGTC	9660
CAATTGTCAG	AATTACCAGA	AGTTCAAACCT	TTTGCTAACC	AAGAAGAAAT	CTTGGATACA	9720
TGGGCAGCCT	TCATGGACTT	TCGTGGACAA	GCACAAAAG	CCTTGGAAGA	AGCTCGTAAT	9780
GCAAAAGTTA	TCGGTAAATC	ACTTGAAGCA	CACTTGACAG	TTTATCCAAA	TGAAGTTGTG	9840
AAACTCTAC	TCGAAGCAGT	AAACAGCAAT	GTAGCACAAC	TTTTGATCGT	GTCTGAGTTG	9900
ACCATCGCAG	AAGGACCAGC	TCCGGAAGCT	GCCCTTAGCT	TCGAAGATGT	AGCCTTCACA	9960
GTTGAACGTG	CTACTGGTGA	AGTATGTGAC	CGTTGCCGTC	GTATCGACCC	AACAACAGCA	10020
GAACGCAGCT	ACCAGGCAGT	TATCTGTGAC	CACTGTGCAA	GCATCGTAGA	AGAAAACTTT	10080
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TACTCAACAA	GAATCAAAGA	GAACTTAGC	AAGCTAACAG	TAGTAAGATA	AAATAGGAAT	10320
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GTTATTTCTG	GTTTCTGAAA	AGTATTATAT	TTTATTTTCAT	ATTATACAAA	TTTTTATTTT	10440
ATAATATCAG	AACATACTTT	TTTTAAAAGC	AAATATGATA	CAATTTTATT	TGAAAAAAAT	10500
AAAAAAGGAG	ATTTTATTAT	AAAATTAAAA	AGACTTGCTT	TAATTAGTGG	TATCGTCGGT	10560
CTTGTTGGGAG	GAATTTTACT	TCTTATTGGT	CCTTTTGTCT	TGTTGGGAAT	AGCGGTAAAC	10620
ACAGCTGCTA	CAACTCTTAA	TGGAGGAGCT	ACTGCAGGGG	CTTTTTCAGG	TGTAGCCTTA	10680
CTCTTGAATG	CCTTGAAGAT	TGCAAATCTT	GTTCTTGCTA	TCATTGCTAT	TGTTTACTAT	10740
AAAGGAGATA	AGCGTGTAGG	TGCAGCTCCG	TCTGTACTAA	TGATTGTTTC	TGGTGGAGTT	10800
AGTCTCATTC	TATTCCGTTC	TTAGGATGGG	TTGGGGGGAT	TTTTGCTATT	ATCGGAGGAT	10860

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CTCTATTCCT	TTCAACATTG	AAGAAATTCA	AATCAGAAGA	ATAAAAGGTA	TTTTAGCATG	10920
AAAAGAACAA	AAAAGTTTAT	CGGTATAGGA	GTAGCTCTAT	TATCTCTTTC	TCTTCTAGTT	10980
GCATGTGGAA	CATAAAGTTC	AAAGAATACT	TCAACAAGTA	ATGATGAGAA	GACAGTAGCA	11040
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ATTGAATCAA	TACGCACTTA	TGCAGATTAT	ATAGATCTTT	ATAAAAATAT	TTTTGATGAT	11160
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GAAGATAGAA	TAGAAACAAC	CAAAAACAAT	GTGATTGCCA	AACATTGTCA	AACAGTCCTT	11340
TCCTTTTTTG	TTTTGACTAG	CTTTTTTGTG	AAAAATTGTG	TAAAATAGAA	TAGATAAACG	11400
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GCCACGGTGA	GTCTGAATGG	AACAAAGCTA	ACCTTTTCAC	TGGTTGGGCT	GATGTTGATT	11520
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GAGCAGCACC	TAATTGGGCC	AAAAACGAGT	CAATATGGGA	CCTATCTGTC	TTTTGGGGAT	12540
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GGGTGGAAG	CTCTAGATTT	TACTATAGAA	CTATCCTTGA	CCTGTGATTT	GGCTTCTGAT	12780
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CATATCTTGA	TGAAGGGAAG	AGTTAAGGAT	AATGATCTGC	GGTTTGCTAG	TTATCTAGCT	12900
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CGTGGAGATG	GCGGCACAGG	CTGGTCCAAG	GCTAATAAGA	TCAATCTCTG	GGCGCGTTTG	14160
GGAGATGGCA	ATCGAGCCCA	TAAATTATTG	GCAGAGCAGT	TAAAGACATC	CACCTTGCAA	14220
AATCTTTGGT	GTAGCCATCC	TCCTTTTCAG	ATAGATGGTA	ATTTTGGTGC	TACTAGTGGC	14280
ATGGCAGAAA	TGTTACTCCA	GTCTCATGCA	GCTTATCTGG	TACCTCTAGC	TGCCCTACCT	14340
GATGCTTGGT	CAACAGGTTT	TGTTTCAGGC	TTAATGGCAC	GTGGACATTT	TGAAGTGAGC	14400

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AAAGCGAAAT GCATGGGGAA AGATTGTATT TCGGTGGCAA CAGCAGAAGG TGATCTTGTT	14580
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CTTGGGGGAA TGGATACCAA TGATGAAGGG GAAATCTGGA TTGATGGTGT TAATATTGCG	15060
GATTATAGTT CCCACCAGCG CACCAATTAC CGTAGAAATG ATGTGGGGTT TGTTTTTCAG	15120
TTTTATAATC TAGTTTCTAA TCTGACAGCT AAGGAAAATG TGGAAGTGGC TTCTGAAATT	15180
GTGACAGATG CCTTGAATCC TGATCAGGCC TTGACAGATG TAGGTCTGGC TCATCGTCTC	15240
AATAACTTTC CAGCCCAGCT TTCTGGAGGG GAGCAACAGC GAGTCTCCAT TGCACGCGCG	15300
GTAGCCAAAA ATCCTAAAAT TCTCCTTTGT GATGAACCGA CTGGAGCCTT GGATTATCAG	15360
ACGGGCAAGC AGGTTTTGAA AATTCTCCAA GACATGTCTC GTCAAAAGGG AGCGACGGTG	15420
ATCATCGTGA CTCATAATGG AGCTTTGGCG CCCATTGCTG ATCGCGTGAT TCAAATGCAC	15480
GATGCCAGTG TCAAGGATGT GGTGCTCAAC CAGCATCCTC AGGATATTGA CAGTTTGGAG	15540
TACTAGCATG ATCAAGCGAA AAAGTTATTG GAAGGACTTA GTTCAGTCCT TCACAGGCTC	15600
CAAGGGGCGT TTTTATCCA TCTTGATCCT GATGATGTTG GGATCTCTAG CCTTAGTAGG	15660
CCTCAAAGTA ACCAGTCCCA ACATGGAGGC GACAGCTAAT GCTTATTTAA CAACTGCTCA	15720
AACCTTGAT TTGGCAGTCA TGTCTAACTA TGGCTTGAT CAAGCAGACC AAGAAGAACT	15780
AAAACAGACG GAGGGCGCAG AGGTCGAGTT TGGCTATTTG ACAGATGTGA CTATGGATAA	15840
TGGGCAGGAT GCCATTGGC TGTACTCCAA ACCAGAGCGA ATTTCAACCT TTCAGCTAAG	15900
AAAGGGACGA CTTCTCAGT CAGACAAGGA AATCGCTTTG GCCACTCATT TGCAAGGCCA	15960
ATACAGCGTG GGACAGGAGA TTAGTTTTAA AGAAAAAGAA GAGGGTCATT CCTCTTTAAA	16020
AGACCATACT TATACCATTA CTGGTTTTGT GGATTGGCT GAAATCCTCT CCCAGCGAGA	16080
TATGGGCTAC GCAGGAAGTG GAAGTGGGAC TCTGACAGCC TATGGGGTGA TTTTACCTAG	16140

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TCAATTTGAT	CAGAAAGTCT	ACAATATAGC	TCGTTTGAAA	TATCAAGATT	TAGCGGGTTT	16200
AAATGCCTTT	TCATCAGCTT	ATGAAGAAAA	ATCCAAGCAA	CATCAAGAAG	AGCTTGAACA	16260
AATTTTATCA	GATAATGGCA	AGGTACGTCT	GCAACTTTTG	AAAAAAGAAG	GACAAGAGTC	16320
TCTAGACAAG	GGGCAAGAGA	CCCTTGACAA	GGCTCAGACT	AATTTGCAGG	AAGGCAAGCG	16380
TCGTTTAGCA	GCTGCTCAAG	CTCGTATACA	GGCTCAAGAA	AGTCAACTAG	CCTTGTTTCC	16440
TCAAGTTCAG	AGAGAGCAGG	CTAGTGCTCA	ACTTACCCAA	GCCAAGCAGG	AATTGGGCAA	16500
GGAAGAGGAC	AAACTAAAGC	AAGCTGAACA	AAATCTAGCC	CAAGAAAAGG	AAAAATTAGA	16560
AAAACATCAG	CAAGTCTTGG	ATGATTTGGC	GGAGCCAAGG	TATCAGGTTT	ATAATCGTCA	16620
GACCATGCCA	GGTGGTCAGG	GCTATCTTAT	GTATAGCAAT	GCTTCATCCA	GTATTCGAGC	16680
AGTGGGCAAT	ATCTTTCCTG	TGGTACTTTA	TGCCGTAGCA	GCCATGGTGA	CCTTTACGAC	16740
CATGACTCGC	TTTGTAGACG	AAGAGCGAAC	TCATGCAGGG	ATTTTAAAGG	CCTTGGGTTA	16800
TCGTAGTAAG	GATATTATCG	CCAAGTTTCT	CCTTTATGGA	CTAGTAGCTG	GGAAGTCTCG	16860
AACGGCTCTA	GGTAGTATAC	TTGGTCATTA	TTTGCTAGCC	AGTGTAATTT	CAAGTGTCAT	16920
TACAAAAGGC	ATGGTGGTGG	GAGAACTCA	GATTCAGTTC	TATTGGACCT	ATAGCTTACT	16980
AGCTTTTGTC	TTGAGCTTGT	TGGCGAGTGT	GTTACCAGCC	TATCTGGTGG	CTTGGAGGGA	17040
ACTTCATGAC	GAAGCAGCCC	AGCTTCTACT	TCCTAAACCT	CCTGTCAAAG	GAGCTAAAAT	17100
CTTATTGGAG	CGTATCGGTT	TTATCTGGCG	TCGTCTCAGT	TTTACTCATA	AGGTAACAGC	17160
CCGCAACATC	TTTCGTTATA	AGCAGAGAAT	GTTGATGACA	ATCTTTGGTG	TGGCAGGTTC	17220
TGTAGCTCTG	CTCTTTGCAG	GTTTGGAAT	CCAATCTTCT	GTAGCAGGAG	TTCCGTCTAA	17280
ACAGTTTCAA	CAAATCCAAC	AGTATCAGAT	GCTTGTCTCT	GAAAATCCTA	GTGCGACCAA	17340
TCAGGACAAG	GTAGAGCTAG	CAGAAGTGTT	GAAAGGGCAG	GAGATACTAG	CCTACCAGAA	17400
AATCTATTCT	AAAGCGCTAT	ACAAGGATTT	CAAAGGCAAA	GCTGGTCTTC	AAAACATTAC	17460
TCTTATGATG	ATAGAGAAGG	AAGATTTGAC	TCCCTTTATC	CATCTTCAAC	ATCATCAGCA	17520
GGAGCTGACA	TTAAAAGATG	GCATCGTTAT	TACAGCTAAA	CTCGCCCAGC	TGGCAGGTGT	17580
CAAGGTGGG	CAGACTTTAG	AAATTGAAGG	TAAGGAACCTA	AAGGTCGTTG	CTATTACTGA	17640
GAAGTACGTT	GGTCACTTTA	TTTATATGAG	TCAGGCTAGC	TATGAGCAAC	TTTACGGACA	17700
GCTACCCCAA	GCCAACACTT	ATCTGGTCTC	ATTAAGGGAT	ACCAGTGCAA	CTAGTATCGA	17760
AAGTCAGGCG	GGCTTGCTTA	TGAATCAATC	TGCGGTGTCC	AGCGTTGTCC	AAAATGCTTC	17820
AGCCATTCGA	CTCTTCGACT	CTATCGCTAG	CTCACTCAAT	CAGACCATGA	CCATCTTGGT	17880
CATCGTATCG	GTTCTATTAG	CTATTGTCAT	CCTTTACAAT	CTGACCAATA	TCAACGTAGC	17940

TGAGAGAATC	CGTGAACCTCT	CCACTATCAA	GGTTCTTGCT	TTTCATAATA	ATGAAGTCAC	18000
CCTCTACATT	TACCGTGAGA	CGATTGTGCT	GTCCCTTGCT	GGAATCGTAC	TTGGTCTGAT	18060
AGCTGGTTTC	TATTTACACC	AATTTTGTAT	TCAAATGATT	TCGCCTGCGA	CTATTCTCTT	18120
TTATCCGCAG	GTAGGCTGGG	AAGTCTATGT	AATCCCAGTG	GCAGCAGTAA	GCATCATTTT	18180
GACCTTGCTT	GGTTTCTTCG	TCAATTATTA	TCTGAGAAAG	GTTGATATGT	TAGAAGCCCT	18240
GAAATCTGTA	GAGTAAGGTA	GTTATTTTTA	GCTGATTGAA	CTTCTATTTA	CTAATATTCA	18300
AAAATCCTCC	GTTTCAAAGA	GCAGGGAAC	CTTTGTGACA	GAGGATTTTT	TCTATAGGGC	18360
TTTAGCAGCT	GCAATTGCGG	CTTCGAAGTT	TGGCTCAGAA	TTGATATTAT	CCACGTATTC	18420
AACGTAGCGA	ATCGTATTGT	CAGTATCGAG	GACAAAGACT	GCGCGTGCTA	ATAGGTGCCA	18480
TTCGTTGATC	AAGAGGGCAT	AATCGCGCCC	GAAAGAATGG	TCAAAGTAGT	CTGAAAGCAT	18540
AATGGCATTG	TCAAGGCCTT	CAGCACCAG	CCAACGTTTT	TGAGCAAAAG	GTAGGTCCAT	18600
TGAAACAGTC	AATACGACCG	TGTTGTCCAG	TCCAGCCAAT	TCTTCATTAA	AACGACGTGT	18660
TTGAGTTGAG	CAGATGCCTG	TATCGATAGA	AGGAACGACA	CTCAAGACTT	TTTCTTGCC	18720
ATCAAAATCA	GCCAGAGATT	TTTTAGAAAG	ATCTGTTGTA	GTAAGAGAAA	AATCAAGCGC	18780
CTTGTCGCCG	ACTTGAGATT	GTTTACCTGT	AAAGCTCACA	GGATTTCCGA	GAAAAGTTAC	18840
CATAGGATAC	TCCAATCTTT	TTTCTTCCAT	TTTAGCTGAA	ACAGTCGGAA	TTTCCAATG	18900
ATTTGACCGG	AAATATGGGC	ATAGAAAAA	CGCCAGCTCA	TGTGAGAATG	ACGTTTTTCA	18960
TAGGTTTATT	TTGCCAATCC	TTCAGCAATC	TTGTCAAGGT	TGTATTTTCAT	CATGCTGTAG	19020
TAGCTGTCGC	CTTCTTTACC	TTGTTCTGCG	ATAGAGTCAG	TAAAGATTTG	AGCGTAGATT	19080
GGGATGTTTG	TGTCTTGAGA	AACAGTTTTT	ATTGGACGGT	CATCCACACT	TGATTCTACA	19140
AAGAGTGATG	GAACTTTGT	TTGGCGAAGT	TTTTCAACCA	AGGTCTTGAT	TTGTTTCAGGA	19200
GTTCTTCTT	CTTCAGTATT	GATTTCCCAG	ATGTAAGCAC	TTGGGACACC	ATAGGCTTTA	19260
GAGAAGTATT	TGAATGCTCC	TTGCTGGTT	ACAATGAGTT	TCTTTTCAGC	AGGGATCTTA	19320
TTAAATTTAT	CCTTACTTTC	TTTATCAAGT	TTGTCTAACT	TATCAGTATA	TTCTTTGAGA	19380
TTTTTTTCAT	AGAATTCTTT	ATTGTTAGGG	TCTTTGGCGC	TCAATTGTTT	GGCGATATTT	19440
TTAGCAAAAA	TAATACCGTT	TTCAAGGTTA	AGCCAAGCGT	GTGGGTCTTC	TTTTCTTTT	19500
TCATTTTGAC	CTTCAAGGTA	GATAACATCA	ACGCCGTCGC	TGACTGCGAA	GTAGTCTTTG	19560
TTTTTCAGTT	TCTTGGCATT	TTCTACCAAT	TTTGTAACC	AAGCATTGCC	ACCTGTTTCA	19620
AGGTTGATAC	CGTTATAGAA	AATCAAATTA	GCCTCAGAAG	TTTTCTTAAC	GTCTTCAGGA	19680

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AGTGGTTCGT	ATTCGTGTGG	GTCTTGCCCA	ATCGGAACGA	TACTATGAAG	GTCAATTTTG	19740
TCACCAGCAA	TATTTT TAGT	AATATCAGCG	ATGATTGAGT	TTGTAGCAAC	AACTTTTAGT	19800
TTTTGACCAG	AAGTTGTATC	TTTTTTTCCG	CTAGCACATG	CTACAAGAAT	GATTGCAGAA	19860
AGAAAGAGAA	CGAGTAATGT	ACCTAATTTT	TTCATTAGAT	CCTCCAATTT	ATTAGGGCTT	19920
TGCCCCCTAT	TTTAACAAAT	GTTTATTTTT	CAGTTTCAAA	TATCGTTGTT	TGGGAGCGAT	19980
AAAGAAGCTA	ATGAGAAAGA	AACTAGCAGC	TGTAAGCACG	ATACTAGAAC	CTGCCGCAAC	20040
ATTAAAACTA	TAGCCAATAA	AGAGTCCCAA	AACTGAAGCA	GTAGCTCCGA	AGGTTGAGGA	20100
AAGGAAAATC	ATACTTTTCA	GACTATTAGC	ATACAGATAA	GCAGTTGCAG	CTGGGGTAAT	20160
CAGCATGGCT	ACAATCAGGA	TAGTTCCGAC	ACTTTGCATG	GCTGTCACAG	ACACGAGAGT	20220
CAGGAGTACC	ATGAGAAGGT	AGTGATAGAA	ATTGACAGGC	ATTCCCATGG	CTTTAGCCAA	20280
GAGTTCATCA	AAGGAAGTTA	TCAAGAGTTG	CTTGAAGAAA	ATCCAGATTA	ACAAGAGGAT	20340
AGCTGCCCCC	ACACCCATAG	TAATAAACAT	ATCCGTATCT	TGGACGGCCA	GGATATTACC	20400
AAAAAGGATA	TGGAAAAGGT	CAGTTGAACT	TTTAGCGACA	CCAATCAAGA	TGATACCGAG	20460
GGCTAAGAAA	GAAGAAAAGG	TAATGCCGAT	GGCGGTATCG	CTTTTGATAA	TCGAGTTTCC	20520
TTTGATGTAG	GTAATGATGA	TGGCAGCTAG	CAATCCAAAG	ACAATGGCTC	CGATAAAGAA	20580
GTCAAGGCCC	AAGATGAAGG	ATAGGGCTAC	ACCTGGTAAG	ACAGCATGTG	AAATGGCATC	20640
TCCCATGAGT	GACATCCCCG	GTAGAATAAT	GAAACATCCC	ACAGCTCCAG	CTACAATCCC	20700
GACGACAATA	GCTGTTATCA	AGGCATTTTG	TAGGAAATGG	AATTTT TGCA	ATCCATCGAT	20760
AAATTCTGCA	ATCATAGGTC	ACCTCCATTG	AAAAAGAGTT	GATTACCGTA	AGCTTCTTTT	20820
AGATTGGTTT	CGGTAAAAGT	TTCTTTTGTT	GGACCAAAGG	CAATCACTTC	TCGATTGACA	20880
AGTAAGACTT	GATCGAAGTA	GTGGGGAATC	TTGCTGAGGT	CGTGGTGAAC	GATGAGAACC	20940
GTCTTCCCAG	CTTTTTTCAA	ATCTCTCAGC	GTATTCATGA	TGATTT CCTC	ACTGACAGAG	21000
TCAATCCCAG	CAAAGGGTTC	ATCCAAGAGG	ATATAGTCGG	CTTCCTGCAC	CAAACATCTG	21060
GCAATCAAGA	CCCGCTGGAA	TTGACCTCCA	GACAGTTGAC	TAATTTGACG	TTCAGCGTAG	21120
TCAGCTAGGC	CGACGATTTT	AAGGGCCTCT	TGCACTTTCT	TCCAATGTTT	AGCCTTTAAA	21180
CTTCGAAAGA	GAGGAATAGA	GGGAAATAGT	CCTAACGAGA	CGCATTCCTT	GACCTTGATG	21240
GGAAAGTTGT	AGTCGATATT	GATTTTTTGT	TCGACATAGG	CAATTCGGTG	TAAGGATTTT	21300
TTAACTTCCT	TGTCATCGAG	AAATGCCTGA	CCTTGATGTG	GGATAATTCC	CAACATACCT	21360
TTTAATAGTG	TTGATTTCCC	AGCGCCGTTT	GGACCAATGA	TGCCGGTAAT	TGTTGGTCCA	21420
TGGAGCACTA	GTGAAATATC	CTTAAGTGCC	AACGTTTCTT	TGTAGGAGAC	ACTGAGGTTT	21480

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TCGATACGTA TCATAAACTT GTATTCCTCC TGTCTCTTAA TATACATTAA AAAAAAAATT	21540
AAGTCAAGTT AATTTTGTAA AAAATTAAAA TAATAACTGA AAAATAGATT CTAAAGATAA	21600
CTTTCAGGAT AAATTTCTAA ATTATAAAAC GCATAGTATC AAGTGTAATA AACTTGGAAT	21660
TATGCGTTTT ATCATGGAAA GATTTTTTAT AATAGCTAAA AAATAA	21706

(2) INFORMATION FOR SEQ ID NO: 37:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6171 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 37:

GATCCCCAGG AAAAACCGAG GTTTTCCCAA TCAATCGTTA CTGTCATATT CCACTCCTTA	60
TTCTAAAAAC CTATTTCTTA TATTCTACAC TATTTTCTA AAATAGCAAG TATATTTTGT	120
AATTTTCAGA AAATTTCTCC AATAAAAACC AACTCTTAGA ACTGATTCTT CATTTCACTT	180
ATTTATCTTC AGTAACTACT TCCTGAAGAT AAGCGTCAAA AACTTCTTCA TCTGAAATCG	240
TGTCAGAAAT GAAGCTTCCA TTGCTAGTGC GTTCTGACAA GTTCAAGTCT TGCAATCGGC	300
TTTCATAGAT TGTTCCTTTA TTGGATTGGA CAAGCAGAGT TTGGTCGTTC ACATCCACTT	360
CCGTACTGAA GAAATCGCCA ACAAATCCTT GCTCTGCAAC TGCTCCTGCC AAGAAGACAC	420
GATGCGGTTT GTTTTCAAC TCACGCAAGA CTTGTAATCC TCGTTTGGCA CGGCTGGTTG	480
CTAGAATTTT CTCAATGGAA ACACGTTTCA AGCTTCCACG CTGGGTCAAG AGGTAGAAGG	540
ACGAAGTATT ACAGATAAAG CCAGATTGGA GGACATCATC TTCTTTCAAA TTCATAGCCT	600
TGACACCTGC TGCCTTAGCA CCGACAACCG GAACCTCTTC GATATTGAAA CGCAGGGCAT	660
AACCATTTTG ACTAACCAAG ACAACATCAT CTAGTTTAAT CGGAGCCACT GCTACAATCT	720
GATCTGTATC GTCTTTGAGC TTAGCATACT TGACAGACTT AGATCTATAG GTCCGCCATG	780
GAGTGAATTC TTTTCGCTCT ACCCGTTTGA TTTGACCAAG GCGAGTCACT GCAAAGTAGG	840
TTGTGCGATC GTCAAACCTGA TCCAGTACTT CCACATAAAG GATTTCTTCA TTCGTTTCAA	900
AGTTTGTGAT GGTTCGGCTC AGATGCTCTC CGATGTCCTT CCAACGAATA TCTGCCAACT	960
CATGGATTGG TCTGTAGATG ACATTTCCAA GACTTGTGAA CATCAAGAGG TGCTGGGTTG	1020
TCTTGGCAGA TTGAACAAAA ATCAAACGGT CATCATCACG CTTGCCAATT TCTTCCAAGG	1080
TGGAAGCCGC AAAGGAACGT GGAAGGTAC GCTTGATGTA ACCTGCCTTG GTCACGCTGA	1140

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CGTAGGTATC	TTCCTCAGCG	ATAAGACTAG	CTGTATCAAT	CTCAATTGCT	TTCGCAGTGT	1200
CTTCTAAAGA	ACTCAAACGA	GGAGTTGCAA	ATTTCTTCTT	GACCTCACGA	AGTTCTTTCT	1260
TCATGAGATT	GTACATAGTC	CTTTCATCAC	CGATAATAGC	CGCCAGCATA	GCAATCTTCT	1320
CACGAAGCTC	TGCTTCTTCT	TCCTGCAAGA	CAACCACATC	GGTATTGGTC	AAACGGTACA	1380
GTTGCAAAGT	TACGATAGCC	TCAGCCTGTT	CTTCCGTAAA	ATCATAGCTA	ACTTTGAGGT	1440
TTTCCTTGGC	GTCCGCCTTA	TTCTCAGAAG	CACGGATAAG	AGCAATGACT	TCATCCAAAA	1500
TCGAAATCAC	ACGAATCAAA	CCTTCGACGA	TATGGAGACG	TTTCTCAGCC	TTTTCTTTGT	1560
CAAAGCGTGA	ACGCGCCAAA	ATCACTTCTC	GACGGTGAGC	GATATAGCTA	GACAGGATTG	1620
GAACAATCCC	AACCTGACGA	GGTGTGAAAT	TGTCAATCGC	CACCATATTA	AAGTTGTAGT	1680
TGATTTGTAG	GTCGGTGTAC	TTAAATAAGT	AGTTGAGAAC	AAGCTCAGTA	TTAGCGTCTT	1740
TCTTAAGTTC	GATAGCGATA	CGAAGACCAT	CACGGTCAGA	CTCATCACGA	ACCTCAGCAA	1800
TCCCAGCTAC	CTTGTTATTA	ACACGAACAT	CATCGATTTT	CTTGACTAGA	TTGGCCTTAT	1860
TGATTTCATA	AGGAATCTCA	ATAATAACGA	TTTGTTCCCT	ACCACCTTTT	AGCTTTTCAA	1920
TTTCAGTCTT	GGAACGAACA	ACCACGCGCC	CTTTCCCAGT	CTCATAAGCT	TTCTTGATTT	1980
CATCACGACC	CTGAATAATA	GCCCCTGTAG	GGAAGTCTGG	TCCAGGCAAG	AATTCCATGA	2040
GTTTATCAAT	CTTTGCAGTT	GGGTGGTCAA	TCATGTAAAC	TGCAGCATCT	ATGACCTCAG	2100
CTAAATTATG	GGGAGGAATG	TCTGTGGCAT	AACCAGCCGA	AATCCCAGTC	GAACCATTGA	2160
CCAAGAGGTT	TGGAAAGGCT	GCTGGCAAGA	CCGTTGGTTC	TTTCTCCGTA	TCGTCAAAGT	2220
TCCATGCAAA	AGGAACTGTC	TTTTTCTCGA	TATCCTGAAG	AAGGTAGCCT	GCAATTTTCA	2280
ACAAACGTGC	CTCAGTATAA	CGCATAGCCG	CAGGAGGATC	TCCGTCCATA	GAACCGTTAT	2340
TACCGTG CAT	TTCAACTAGA	ATCTCACGAT	TTTTCCAGTT	CTGTGACATA	CGAACCATGG	2400
CATCATAGAT	AGAAGAATCC	CCGTGTGGGT	GGAAATTCCC	CATGATGTTC	CCGACTGACT	2460
TGGCCGACTT	ACGGTAGCTC	TTGTCAAAAAG	TATTGCTATC	CTTATTCATA	GAATAAAGAA	2520
TACGGCGCTG	AACCGGCTTC	AACCCATCAC	GAATATCTGG	CAAAGCCCCG	TCTTGAATAA	2580
TGTACTTGGA	GTAGCGACCA	AAGCGCTCTC	CCATGATGTC	CTCCAGGGAC	ATGTTTTGAA	2640
TGTTAGACAT	AAGATACAAA	GCCCATAAAA	TACCAAGTGA	AAATAGAAAA	TTCTTGAAGT	2700
AAGCAAAC TC	ACAAGAGAAT	TTATCTTTTT	CACACAGTAT	CTAGGGCGTG	TTCAACTCCT	2760
TTCAAAGAAT	GTAGAGTAGG	TTTTTATGCA	GTAAAAGATA	TTTTACGGGA	ATTCTCCCCG	2820
TGTTCAAGTTA	CGATAAGTAA	CCAAACTATC	CTGTTTGTAT	TTTTCAATAT	GAAAATCTGG	2880
TTTTCCAAAA	TTAGTCTTAG	TTTGTGTCTT	AGCCGCTCCC	TTAAGCGCCT	CTTTGAGATA	2940

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AGCACTCATA GCAGATTCTT CATTAATAAT CCTGCAATTT TTTCAAACCA AGATTTTCAA	3000
ACTGCTTTTT CACATAGTCA TTCACATCCG ACTCTAATTT CCAGTTTACT AACATATTAT	3060
TTTCTTTTCAT TAAAACACTG TCGTTTCTTC TAGCGTAAAC TTGACATTAT CTTCAATCCA	3120
TTTACGGCGT GGTCTACCT TATCTCCCAT GAGAACATTG ACGCGGCGTT CGGCGCGCGC	3180
TAAATCTTCA ATTGTGACAC GGATGAGGGT ACGTGTTCCT GGGTTCATGG TTGTTTCCCA	3240
GAGCTGGTCC GCATTCATCT CACCAAGTCC TTTGTATCGT TGGAGGGTAG CGCCTTTACC	3300
GAAGTGTTTA CGGAGTTCTT CTAGTTCTCC GTCCGTCCAA GCGTAGGCCA CTTCTTCTTT	3360
CTTGCCTTTA CCTTTGGACA TCTTGTAAG AGGTGGGAGG GCAATATAGA CATGACCTGC	3420
CTCGACTAGC GGACGCATGT AACGGTAGAA AAATGTCAAG AGCAAGGTCT GGATATGGGC	3480
ACCGTCGGTA TCCGCATCGG TCATGATAAT GATCTTATCA TAGTTGGCAT CTTCAATAGA	3540
GAAGTCTGCT CCAACACCCG CACCAATGGT ATAAATCATG GTATTGATCT CTTCATTTTT	3600
GAGGATATCC GCCATCTTGG CCTTGGCTGT ATTGACAACC TTACCACGAA GAGGTAGAAT	3660
AGCCTGGAAC TTGCGGTCAC GACCTTGTTT GGCAGAACCA CCGGCAGAGT CCCCCTCAAC	3720
TAGATAGAGT TCATTCTTAG CAGGATTCTT AGATTGGGCT GGGGTCAATT TCCCAGACAA	3780
CAAGCCCTTA TCTTTCTTGT TTTTCTTCCC ATTTCCGGCTC TCATCACGCG CCTTACGTGC	3840
TGCTTCACGA GCATCACGGG CCTTGATAGC CTTGCGGATG AGGTTAGAAG CTAATTCCCC	3900
ATTTTCCATA AGGAAAAAGG TCAACTTATC AGCCACTATT CCATCCACAA CTGGGCGAGC	3960
TAGGGGGCTT CCTAGTTTAT CCTTGGTCTG TCCTTCAAAC TGCAAGTGTT CTTCAGGAAC	4020
TAAGATAGAA AGAACGGCCG CTAGTCCCTC ACGATAGTCT GAACCTTCAA GGTTTTTATC	4080
TTTTTCCTTG AGAAGACCTG TTTTACGTGC ATAGTCATTC ATGACCTTGG TAATGGCAGA	4140
CTTGAGTCCT GTCTCGTGCG TTCCACCGTC CTTGGTGCGA ACGTTATTGA CAAAAGATAG	4200
AATGTTATCT GAGAATCCGT CATTGTACTG GAGGGCTACT TCCACTTGAA AACCATTGTC	4260
TTCCCCCTCA AAGTAAAGAA CTGGCGTCAA GATTTCCCTTA TCTTCGTTGA GATAAGAAAC	4320
AAAATCTTGT ACTCCATTCT CATAGTGGA CTCAATCGCT TCATTTGTTC GCTTGTCCGT	4380
TAAAGACAAG GTCACATTTT TCAAGAGAAA GGCTGATTCA TTAAGGCGCT CTGAAATGGT	4440
ATTGTACTTG AAATCTGTCG TAGAAAATAT AGTCGCGTCA GGCATAAAAG TAACTTTGGT	4500
GCCTGTTTTA GACTTGGGTG CTGTACCGAT TTTCTTCAAA GTCGTGACAG GTTTTCCACC	4560
ATTTTCGAAA CGTTGCTTGT AACTGCGCC ATCACGGGTA ATTTCAACTT CTAACCAGCT	4620
AGAAAGGGCG TTAACAACGG AAGAACCCAC TCCGTGAAGT CCACCTGATG TCTTATAGCC	4680

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ACCTTGACCG AATTTCCTC CGGCATGAAG AATGGTAAAG ATAACCTCAA CAGTTGGAAT	4740
TCCCATAGCG TGCATACcTG TCGGCATCCC ACGTCCATGG TCTTGAACCG TTAGACTACC	4800
GTCTTTATTG ATAGTTACAT CAATACGATC ACCAAACCCA GACAAGGCTT CATCGACTGC	4860
ATTATCAACG ATTTCCCAA CTAGGTGATG AAGACCAGCG CCATCGGTCTG ATCCAATATA	4920
CATCCCTGGA CGTTTTCGGA CCGCATCCAA CCCTTCTAGC ACCTGAATAG CATCATCATT	4980
ATAATTGTTA ATATTGATTT CCTTTTTTGA CACAAGGAAC CTCCTATTCTG TTCATCTTTA	5040
CTATTCTACA GGTTTTCCAA GGATTTTGCA AAATTTTTCT TTCTCCGATG TGACAATTTT	5100
AGCAGAGATT CTCTGCTTTT CTTTCCCAAT TCATGATATA ATAGGAGTAT GATTACAATA	5160
GTTTTATTAA TCCTAGCCTA TCTGCTGGGT TCGATTCCAT CTGGTCTCTG GATTGGACAA	5220
GTATTCTTTC AAATCAATCT ACGCGAGCAT GGTTCTGGTA ACACTGGAAC GACCAACACC	5280
TTCCGCATTT TAGGTAAGAA AGCTGGTATG GCAACCTTTG TGATTGACTT TTTCAAAGGA	5340
ACCCTAGCAA CGCTGCTTCC GATTATTTTT CATCTACAAG GCGTTTCTCC TCTCATCTTT	5400
GGACTTTTGG CTGTTATCGG CCATACCTTC CCTATCTTTG CAGGATTAA AGGTGGTAAG	5460
GCTGTGCAA CCAGTGCTGG AGTGATTTTC GGATTTGCGC CTATCTTCTG TCTCTACCTT	5520
GCGATTATCT TCTTTGGAGC TCTCTATCTT GGCAGTATGA TTCACTGTC TAGTGTCACA	5580
GCATCGATTG CGGCTGTTAT CGGGGTCTG CTCTTTCCAC TTTTGGTTT TATCCTGAGT	5640
AACTATGACT CTCTCTTCAT CGCTATTATC TTAGCACTTG CTAGTTTGAT TATCATTCGT	5700
CATAAGGACA ATATAGCTCG TATCAAAAAT AAAACTGAAA ATTTGGTCCC TTGGGGATTG	5760
AACCTAACCC ATCAAGATCC TAAAAAATAA AATGCCAGTT CTGTACTGCC CCCAAACAGT	5820
TAGACAAATA ATTTATCCAA AGGATTTAGT TCTGTACTGC ACAGGACTAA GTCCTTTTAG	5880
TTTTACCTTA ATTCGTTTGT TGTTGTAGTA ATCAATATAG TCTATAATGG CTTGTTCCAA	5940
TTGATTAAGT GATTTAAATG TTTTCTCATA GCCATAAAAC ATTTCGGATT TTAAAATGCC	6000
AAAGAAAGAT TCCATCCTAC CGTTGTCTTG GCTGTTGCCC TTACGTGACA TGGATGCTTG	6060
AATTCCTTA CTCTCTAGGA ACCGATGATA AGAATCGTGT TGGTATTGCC AGCCTTGGTC	6120
ACTATGGAGA ATCGTATTCT CGTAGTGCTT CTCTGTGAAT GCCTGTTCCA A	6171

(2) INFORMATION FOR SEQ ID NO: 38:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 18475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 38:

TATTACAAAT	AAAAAACGG	AGGAGTGCTT	TATGAAAGCC	TATACTTATG	TTAAACCAGG	60
ACTTGCTTCT	TTTGTGATG	TAGACAAACC	AGTTATTCGC	AAGCCAACAG	ACGCTATTGT	120
GCGTATTGTA	AAAACCACTA	TTTGTGGAAC	AGACCTCCAT	ATTATCAAAG	GGGATGTTCC	180
TACTTGCCAA	AGTGGTACCA	TTCTTGGCCA	CGAAGGGATT	GGGATTGTTG	AAGAAGTTGG	240
GGAAGGAGTT	TCCAACCTCA	AAAAAGGTGA	CAAGGTCTTG	ATTTCTTGCG	TCTGTGCCTG	300
TGGTAAATGC	TACTACTGTA	AAAAAGGAAT	TTATGCTCAC	TGTGAAGACG	AAGGGGGCTG	360
GATTTTCGGT	CACTTGATTG	ATGGTATGCA	GGCTGAATAT	CTACGTGTCC	CTCATGCAGA	420
TAATACTCTT	TACCATACTC	CAGAAGACTT	GTCAGATGAA	GCTTTGGTTA	TGCTGTCAGA	480
CATTCTGCCT	ACTGGATATG	AAATTGGTGT	CTTAAAAGGG	AAAGTAGAAC	CTGGTTGCAG	540
CGTAGCCATT	ATTGGTTCAG	GTCCAGTTGG	ATTGGCTGCT	CTTTTAACAG	CCCAATTCTA	600
TTCACCAGCT	AAATTGATTA	TGGTAGACCT	AGACGATAAC	CGCTTGGAAG	CTGCCCTATC	660
ATTCGGTGCG	ACTCATAAGG	TTAATTCTTC	AGACCCTGAA	AAAGCCATTA	AAGAAATTTA	720
TGATTTGACA	GATGGTCGTG	GTGTGGATGT	CGCTATCGAA	GCTGTTGGTA	TTCTTGCAAC	780
ATTTGATTTT	TGTCAAAAGA	TTATCGGTGT	AGACGGAACG	GTTGCCAACT	GTGGTGTGCA	840
TGGTAAACCA	GTTGAATTCG	ATTTAGATAA	ACTTTGGATT	CGCAACATCA	ATGTAACAAC	900
TGGTTTGGTA	TCTACAAATA	CGACTCCACA	ATTGTTGAAA	GCACTTGAAA	GTCATAAGAT	960
TGAACCGGAA	AAATTGGTAA	CTCACTATTT	CAAACCTCAGT	GAAATTGAAA	AAGCCTACGA	1020
AGTCTTCAGT	AAGGCAGCAG	ACCACCATGC	CATTAAGGTC	ATTATCGAAA	ACGATATCTC	1080
AGAAGCCTAA	GTAGTAAAAA	TATTTTTGTA	CATAAGTAAA	TAGAAATTCA	GTCATCCATC	1140
AGATGGCTGG	ATTTTTTATC	AAAAAATTAA	GAAATGAGCA	TATTTCTTTC	CTTGCTCTGGC	1200
GGAATTGGTT	ATAATATACG	GTACAAAGGA	ATGAATGAAT	ATGTATCGTG	TTATAGAAAT	1260
GTACGGAGAT	TTTGAACCGT	GGTGGTTCTT	AGAAGGTTGG	GAAGAAGATA	TTGTAGCAAG	1320
TAGAAAATTT	GACCAGTATT	ATGATGCTCT	CAAATACTAC	AAAACCTGCT	GGTTTAGATT	1380
GGAACAAGAA	TCGCCTCTTT	ATAAAAGTAG	AAGCGACTTG	ATGACCATTT	TTTGGGACCC	1440
GGAAGACCAA	CGCTGGTGTG	ATGAATGTGA	TGAGTATTTA	CAACAATACC	ATTCTTTGGC	1500
TCTTTTGCAG	GATGAGCAGG	TTATCCCAGA	CGAAAACTA	CGCTCAGGCT	ATGAAAAACA	1560
AACCAGTCAG	GAAAGGAATC	GTTCTTGCCG	TATGAAATTA	AAATAGAGAA	AAGTAACTTT	1620
TTTGGAGTTG	CTTTTTTTAT	TTTTCTAACT	CTTTGCGAAT	AGTATAGGTG	AGGAGGTAAG	1680

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TATGGTTCAA	GAAATTGCAC	AAGAAATCAT	TCGTTTCAGCT	CGGAAAAAAG	GGACGCAGGA	1740
TATCTATTTT	GTCCCTAAGT	TAGACGCCTA	TGAGCTTCAT	ATGAGGGTAG	GAGACGAGCG	1800
CTGTAAAATT	GGTAGCTATG	ATTTTGAAAA	GTTTGCAGCC	GTTATCAGTC	ACTTTAAGTT	1860
TGTGGCGGGT	ATGAATGTGG	GAGAAAAAAG	ACGTAGTCAA	CTGGGTTTCCT	GTGATTATGC	1920
CTATGACCAT	AAGATAGCGT	CTCTACGTTT	ATCTACTGTA	GGCGATTATC	GGGGGCATGA	1980
GAGTTTGGTT	ATCCGTTTGT	TGCACGATGA	GGAGCAGGAC	CTGCATTTTT	GGTTTCAGGA	2040
TATTGAAGAA	TTAGGCAAGC	AGTACAGGCA	ACGGGGACTC	TATCTTTTTG	CTGGTCCGGT	2100
TGGGAGTGGT	AAGACGACCT	TGATGCATGA	ATTGTCCAAG	TCACTCTTTA	AAGGACAGCA	2160
AGTTATGTCC	ATCGAAGATC	CTGTCGAAAT	CAAGCAGGAC	GACATGCTTC	AGTTGCAGTT	2220
GAACGAAGCA	ATCGGCCTAA	CCTATGAAAA	TCTAATCAAA	CTTTCCTTGC	GTCATCGACC	2280
AGATCTCTTG	ATTATCGGAG	AAATTCGTGA	CAGCGAGACG	GCGCGTGCAG	TGGTCAGAGC	2340
TAGTTTGACA	GGTGCGACAG	TCTTTTCAAC	CATTACAGCC	AAGAGTATCC	GAGGTGTTTA	2400
TGAGCGTCTG	CTGGAGTTGG	GTGTGAGTGA	AGAAGAATTG	GCAGTTGTTC	TGCAAGGAGT	2460
CTGCTACCAG	AGATTAATCG	GGGGAGGAGG	AATCGTTGAC	TTTGCAAGCA	GAGATTATCA	2520
AGAACACCAA	GCAGCCAAGT	GGAATGAGCA	AATTGACCAG	CTTCTTAAAG	ATGGACATAT	2580
CACAAGTCTT	CAGGCTGAGA	CGGAAAAAAT	TAGCTACAGC	TAAGCAAAAA	AATATCATCA	2640
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ATAGGAGTGC	TTTGTTGGAC	AAGCAGTGTG	TGACCCAGAT	GCGTGTGGGC	TTGTCTCAGG	2760
GGAAATCATT	CTCAGAAATG	ATGGAAAGTT	TGGGATGTTC	AAGTGCTATT	GTCACTCAGT	2820
TATCCCTAGC	TGAAGTTCAT	GGCAATCTCC	ACCTGAGTTT	GGGAAAGATA	GAAGAATATC	2880
TGGACAATCT	GGCTAAGGTC	AAGAAAAAAT	TGATTGAAGT	AGCGACCTAT	CCCTTGATTT	2940
TGCTGGGTTT	TCTTCTCTTA	ATTATGCTGG	GGCTACGGAA	TTACCTGCTC	CCACAACCTGG	3000
ATAGTAGCAA	TATTGCCACC	CAAATTATCG	GTAATCTGCC	CCAAATTTTT	CTAGGCATGG	3060
TAGGGCTTGT	TTCCGTGCTT	GCCCTTTTAG	CACTCACTTT	TTATAAAAGA	AGTTCTAAGA	3120
TGAGTGCTTT	TTCTATCTTA	GCACGCCTTC	CCTTTATTGG	AATCTTTGTG	CAGACCTACT	3180
TGACAGCCTA	TTATGCACGT	GAATGGGGGA	ATATGATTTC	ACAGGGAATG	GAGTTGACGC	3240
AGATTTTTCa	AATGATGCAG	GAACAAGGTT	CCCAGCTCTT	TAAAGAAGTC	GGTCAAGATC	3300
TGGCTCAAAC	CCTGAAAAAT	GGCCGTGAAT	TTTCTCAGAC	GATAGGAACC	TATCCTTTCT	3360
TTAGGAAGGA	ATTGAGTCTC	ATCATAGAGT	ATGGGGAAAGT	TAAGTCCAAG	CTGGGTAGTG	3420
AGTTGGAAAT	CTATGCTGAA	AAAACCTGGG	AAGCCTTTTT	TACCCGAGTC	AACCGCACCA	3480

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CGGCAATGCT CATGCCCCATG TATCAAAATA TGGAGGTAAA TTTTATAAAT GAAAAAATG	3600
ATGACATTCT TGAAAAAGC TAAGGTATAA GCTTTTACAT TGGTGGAGAT GTTGGTGGTC	3660
TTGCTGATTA TCAGCGTGCT TTTCTTGCTC TTTGTACCTA ATCTGACCAA GCAAAAAGAA	3720
GCAGTCAATG ACAAAGGAAA AGCAGCTGTT GTTAAGGTGG TGGAAAGCCA GGCAGAACTT	3780
TATAGCTTAG AAAAGAATGA AGATGCTAGC CTAAGAAAGT TACAAGCAGA TGGACGCATC	3840
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TATCCTTGCC TTGGGCTTGT CCGGCTCTGT CCAGTCCACT TTTTCAGCGG TAGAGGAACA	4020
GATTTTCTTT ATGGAGTTTG AAGAACTCTA TCGGGAAACC CAAAAACGCA GTGTAGCCAG	4080
TCAGCAAAAG ACTAGTCTGA ACTTAGATGG GCAGACGCTT AGCAATGGCA GTCAAAAGTT	4140
GCCAGTCCCT AAAGGAATTC AGGCCCCATC AGGCCAAAGT ATTACATTTG ACCGAGCTGG	4200
GGGCAATTCG TCCCTGGCTA AGGTTGAATT TCAGACCAGT AAAGGAGCGA TTCGCTATCA	4260
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GACAAATTCA AAAAAATAGG CAAGAGGAAG CAAAAATCTT GCAAAAGGAA GAAGTCTTGA	4440
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CAACTGGTTC GCTTTCATTT CCAGTTCCAA AAAGGCTTAG AAAGGGAGTT CATCTATCGT	4980
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CTTTAGTCTT TTGTTGCAAT TTTATTTGAA CCGACAAGTC GCCCACTATC AAGACTATGC	5100
TTTGAATAAA GAAAAATTGG TTGCTTTTGC TATGGCTAAA CGAACCAAAG ATAAGGTTGA	5160
GCAAGAAAGT GGGGAACAGT TTTTAAATCT AGGTCAGGTA AGCTATCAAA ACAAGAAAAC	5220

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TGGCTTAGTG	ACGAGGGTTC	GTACGGATAA	GAGCCAATAT	GAGTTTCTGT	TTCCTTCAGT	5280
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AGTGGAGAAG	AAAAAATCAG	AAGAGAAGCC	TGAAAAGAAA	GAGAATTCAT	AGTCAATTCA	5400
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TCTTCCTCGC	AAACTTGGTA	TGTCAAGCAG	CCGAGAAACA	GATTGATCTT	CTATCAGACA	5640
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AATCCCTTGG	AGAAAGAGTT	TGATTGCCTT	GCTGTTAGTC	GGGTTCTTCA	TCATATGCCT	5880
GATTTGGATG	CGGCTCTCTC	ACTGTTTCAT	CAACATTTGA	AGGAAGATGG	GAAACTCATC	5940
ATTGCTGATT	TTACCAAGAC	AGAAGCTAAT	CATCATGGAT	TTGATTTAGC	TGAACTGGAA	6000
AACAAGCTAA	TTGAGCATGG	TTTTTCATCT	GTGCATAGTC	AGATTCTCTA	TAGTGCTGAA	6060
GACCTGTTTC	AAGGAAATCA	CTCAGAATTC	TTTTTAATAG	TAGCCCAAAA	ATCACTCGCC	6120
TAGTCAGGGA	GTGATTTTTT	TATAAGGATG	GAAAAAGAA	GGGAAATTTG	GTAAGATAGG	6180
AATATGGATT	TTGAAAAAAT	TGAACAAGCT	TATACCTATT	TACTAGAGAA	TGTCCAAGTC	6240
ATCCAAAGTG	ATTTGGCGAC	CAACTTTTAT	GACGCCTTGG	TGGAGCAAAA	TAGCATCTAT	6300
CTGGATGGTG	AAACTGAGCT	AAACCAGGTC	AAGGAGAACA	ATCAAACCCT	TAAGCGTTTA	6360
GCACTACGCA	AAGAAGAATG	GCTCAAGACC	TACCAGTTTC	TCTTGATGAA	GGCTGGGCAA	6420
ACAGAACCCT	TGCAGGCCAA	TCACCAGTTT	ACACCGGATG	CTATTGCTTT	GCTTTTGGTG	6480
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CAGGCTGGCT	TTGTCCAAGG	AGATGCCGTT	CGCCCACAAA	TGCTCAAAGA	AAGCGATGTG	6720
GTCATCAGTG	ACTTGCCTGT	CGGCTATTAT	CCTGATGATG	CCGTTGCGTC	GCGCCATCAA	6780
GTTGCTTCTA	GCCAAGAACA	TACTTACGCC	CATCACTTGC	TCATGGAACA	AGGGCTTAAG	6840
TACCTCAAGT	CAGACGGATA	CGCTATTTTT	CTAGCTCCGA	GTGATTTGTT	GACCAGTCCT	6900
CAAAGTGATT	TGTTAAAAGA	ATGGCTGAAA	GAAGAGGCGA	GTCTGGTTGC	TATGATTAGT	6960
CTGCCTGAAA	ATCTCTTTGC	TAATGCCAAA	CAATCTAAGA	CTATTTTTAT	CTTACAGAAG	7020

AAAAATGAAA	TAGCAGTAGA	GCCTTTTGTT	TATCCACTTG	CTAGCTTGCA	AGATGCAAGT	7080
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AGATTTTGTT	ATAATAGTTG	AAAACGCTTA	AAAAGGGGTA	TCATGTTATG	ACAAAAACAA	7200
TTGCAATCAA	TGCAGGAAGT	TCAAGTTTGA	AATGGCAATT	ATACTTAATG	CCAGAAGAAA	7260
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GAGATGTTTT	AGAAAAAGTT	GAAGAGTTGA	GTTTGTTGGC	TCCTCTACAC	AACCCGGCCA	7560
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TTGATACTTC	CTTCCACACA	AGTATGCCAG	AGAAAGCTTA	TCGCTACCCT	CTACCAACAA	7680
AATATTACAC	AGAAAACAAG	GTTTCGTAAAT	ACGGTGCTCA	TGGTACAAGT	CACCAGTTTG	7740
TAGCAGGAGA	AGCTGCAAAA	CTCTTGGGAC	GTCCATTAGA	AGACTTGAAG	TTAATTACCT	7800
GTCATATTGG	TAACGGAGGC	TCAATTACAG	CTGTGAAAGC	CGGCAAATCT	GTAGACACTT	7860
CTATGGGGTT	CACTCCTCTT	GGTGGTATTA	TGATGGGAAC	GCGTACAGGG	GATATTGATC	7920
CAGCTATCAT	TCCTTATTTA	ATGCAATATA	CAGAGGATTT	TAACACACCA	GAAGATATCA	7980
GTCGTGTTCT	TAACCGTGAA	TCAGGTCTTT	TGGGAGTTTC	TGCTAATTCT	AGCGATATGC	8040
GCGATATAGA	AGCAGCTGTA	GCAGAAGGGA	ATCACGAGGC	TAGCTTGGCT	TATGAAATGT	8100
ATGTTGACCG	TATCCAAAAA	CATATCGGTC	AGTACCTTGC	AGTGCTAAAT	GGAGCAGATG	8160
CCATTGTTTT	CACAGCAGGT	GTCGGTGAAA	ATGCAGAGAG	TTTCCGTCGT	GATGTAATCT	8220
CAGGGATTTT	GTGGTTTGGT	TGTGATGTTG	ATGATGAAAA	GAATGTCTTT	GGCGTTACAG	8280
GAGACATCTC	AACAGAGGCA	GCTAAAATCC	GTGTCTTGGT	TATCCAACA	GATGAAGAAT	8340
TAGTCATTGC	CCGTGACGTT	GAACGCTTGA	AAAAATAAGT	GAAACTAAAA	AAATATTCAA	8400
TACAAGGAGT	TGGGAAAGTT	ATTTTTCCAG	CTTCTTTTTT	TGATGAAATT	GTCCAAAACC	8460
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TGAGTTTTGA	AGAAAACTT	TCGTGTAAAA	AGAGAGAAAG	ATTTTAAGGC	GATTTTCAAG	8580
GAGGGGACAA	GTTTTGCTAA	TCGCAAATTT	GTGGTCTACC	AATTAGAAAA	CCAGAAAAAC	8640
CGTTTTTCGAG	TAGGTCTATC	AGTTAGCAAA	AACTGGGGA	ATGCCGTCAC	TAGAAATCAA	8700
ATTAAGCGAC	GGATTCGGCA	TATTATCCAG	AATGCAAAAG	GGAGTCTGGT	AGAAGATGTC	8760

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GACTTTGTTG	TCATTGCTCG	AAAAGGAGTC	GAAACCTTGG	GATACGCAGA	GATGGAGAAA	8820
AATCTACTCC	ATGTATTAAA	ATTATCAAAG	ATTTACCGGG	AAGGAAATGG	GAGTGAAAAA	8880
GAAACTAAAG	TTGACTAGTT	TGCTAGGACT	GTCTCTGTTA	ATCATGACAG	CCTGTGCGAC	8940
TAATGGGGTA	ACTAGCGATA	TTACAGCCGA	ATCGGCTGAT	TTTTGGAGTA	AATTGGTTTA	9000
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AAGTACTTGG	TTGTCCAACA	AAGCTTTGTC	TGAGCGAAAT	GGCGCTACGA	CTGCGATGAT	9480
GTATGGGATT	CCAGTCTTGA	TTTTTATCTT	TGCAGTTTAT	GCGCCAGGTG	GAGTCGCCCT	9540
ATACTGGACA	GTGTCTAATG	CTTATCAAGT	CTTGCAAACC	TATTTCTTGA	ATAATCCATT	9600
CAAGATTATC	GCAGAGCGCG	AGGCCGTAGT	ACAGGCACAA	AAAGATTTGG	AAAATAGAAA	9660
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TTATCTTTAC	AACCGCTATT	CCAGAACCTT	CTACGTTACA	ATCAATGTCA	ATGATTATGT	10500
CGAACACCGT	GCAGAAGTCT	TGCAGACCTA	TGCGCAAAAA	TTGGCGACTC	GTGTTTTGGA	10560

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AGAAGGGCGC	AGTCATAAAA	CAGATCCAAT	GTCAAATAGC	GAACGCAAGA	TTATCCATCG	10620
TATTATTTCA	CGTATGGATG	GCGTGACTAG	TTACTCTGAA	GGTGATGAGC	CAAATCGCTA	10680
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GAGGTTAAAC	TGATGTTGAA	TAAGATAAGA	GACTATTTAG	ACTTTGCTGG	TTTGCAGTAC	10800
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CAAGAGGCC	GAAAGGTTTT	TACAGAACTG	GCCAAAGCCT	TTCAAGCAAG	CCATCCAGAA	10920
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CCTATGACAG	AAAATTCGTC	TGAAGAAGAA	ATCGTAGAAG	GCTTATTGAA	GTCTTATTCT	11340
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AGCAGCGATT	GGTATCATCT	GTGGACTTTA	CTGGGCAGTT	AGTTCAAATA	TGACTGTTGA	12060
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AATCTGGTTT	GTAGATAAAG	TAGCAGGACG	CTTTGGTAAG	AAAGAAGAAA	GTTTAGACAA	12180
TCTTAAATTA	CCTAAGTTCC	TCTCAATCTT	CCACGATACA	GTTGTTGCAT	CTGCTACCTT	12240
GATGCTCGTA	TTCTTCGGAG	CCATTCTTTT	AATCTTGGGT	CCAGACATTA	TGTCTAATAA	12300

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AGAAGTCATC	ACTTCAGGAA	CTCTATTCAA	TCCTGCTAAA	CAAGATTTCT	TTATGTACAT	12360
TATCCAAACA	GCCTTTACCT	TCTCAGTTTA	CTTGTTTCGTT	TTGATGCAAG	GTGTCCGAAT	12420
GTTCGTATCT	GAGTTGACAA	ACGCCTTCCA	AGGTATTTCA	AACAAATTGT	TGCCAGGTTC	12480
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TCAATTTGCC	AAAGCAAAAG	ATAAAGAGAA	ATATTACAAC	GGTGAAGTTC	AAGAAGAAGC	12960
TTAGTATCTA	GAAAAGGAGA	AATAAAATGG	TTAAAGTATT	AGCAGCGTGC	GGAAATGGAA	13020
TGGGTTTCATC	AATGGTTATC	AAGATGAAGG	TTGAAAATGC	TCTCCGTAAG	CTTAATCAAA	13080
CAGATTTTAC	AGTCAATTCA	TGCAGTGTCT	GTGAAGCTAA	AGGTTTAGCA	GTAGGATATG	13140
ACATCGTAAT	CGCTTCTCTT	CATTTGATTC	AAGAATTGGA	AGGGCGAACT	AATGGGAAGT	13200
TAATTGGGCT	TGATAACTTG	ATGGATGATA	AAGAAATCAC	CGAAAACTC	AGTCAAGCAC	13260
TACAGTAAAA	GGTTGGAGGG	GGCTGGACAG	AAACTGAGAG	TTATCGTTTC	TGTCCTTCTC	13320
CCTCTTTAAA	TAAAGGAGGC	AGATATGAAT	TTAAAACAAG	CTTTAATTGA	CAATGACTCG	13380
ATCCGACTAG	GTTTAGAGGC	TAACAATTGG	AAAGAAGCAG	TCAAGGTAGC	AGTAGATCCC	13440
TTAATTGAAA	GTGGGGCAAT	TTTGCCAGAG	TATTACGATG	CTATCATTGA	ATCGACTGAA	13500
GAGTATGGGC	CTTACTATAT	CTTGATGCCA	GGTATGGCTA	TGCCCCACGC	TAGACCTGAA	13560
GCAGGTGTGC	AAAGTGATGC	CTTTTCATTG	ATTACCTTAC	AAAATCCTGT	TGTATTTTCA	13620
GATGGGAAAG	AGGTATCTGT	TTTGTTGGCA	CTAGCAGCAA	CAAGTTCAAA	AATTCACACA	13680
AGTGTAGCCA	TTCCACAAAT	TATTGCCCTA	TTTGAATTAG	AAGATTCTAT	TGCACGTTTA	13740
CAGGCTTGCC	AGACTAAAGA	AGATGTCTTG	GCTATGATTG	AAGAATCTAA	GGATAGCCCT	13800
TATCTCGAAG	GATTGGATTT	GGAAAGTTAG	AAAGAGGAAT	AAAGAAATGA	CAAAAAGAAT	13860
ACCTAATTTA	CAAGTTGCAT	TAGACCATTG	AGACTTGCAA	GGAGCGATTA	AAGCAGCTGT	13920
TTCTGTTGGT	CAGGAAGTAG	ATATTATCGA	AGCTGGAAC	GTTTGCTTGC	TTCAAGTTGG	13980
AAGTGAAGT	GCTGAAGTCT	TGCGTAGCCT	TTTCCCAGAT	AAGATTATTG	TGGCAGACAC	14040
AAAATGTGCT	GATGCTGGTG	GAACAGTTGC	TAAAAATAAT	GCGGTTCTGT	GAGCAGACTG	14100

GATGACTTGT	ATCTGTTGTG	CAACCATCCC	TACTATGGAA	GCAGCTCTAA	AGGCTATCAA	14160
GACTGAACGA	GGAGAACGAG	GCGAAATCCA	GATCGAGCTT	TATGGCGATT	GGACTTTTGA	14220
ACAAGCTCAG	CTTTGGCTAG	ATGCAGGTAT	CTCACAAGCT	ATTTATCACC	AATCTCGTGA	14280
TGCTCTTCTT	GCTGGTGAAA	CTTGGGGTGA	AAAAGACCTT	AATAAGGTTA	AAAAACTCAT	14340
TGACATGGGC	TTCCGTGTAT	CTGTAACAGG	TGGTCTAGAT	GTAGATACTC	TCAAACCTCT	14400
TGAAGGTATT	GATGTCTTTA	CCTTTATCGC	AGGTCGTGGA	ATTACAGAGG	CTGTGGATCC	14460
AGCAGGAGCA	GCGCGTGCCT	TCAAGGATGA	AATCAAACGA	ATTTGGGGGT	AAATCATGGT	14520
ACGTCCAATT	GGAATTTATG	AAAAGGCAAC	CCCAACACAC	TGTACTTGGC	TAGAACGTTT	14580
AAATTTTGCC	AAGGAGTTAG	GCTTTGATTT	TGTCGAGATG	TCTATTGACG	AACGTGACGA	14640
GCGTTTAGCA	AGACTTGACT	GGAGTAAGGA	AGAACGCTTG	GAAGTTGTCA	AAGCAATCTA	14700
TGAAACTGGT	GTTCGTATTC	CTTCTATCTG	TTTTTCAGGC	CATCGTCGCT	ACCCATTGGG	14760
TTCAAAAGAT	CCAGTTCTAG	AGGAAAAATC	TCTAGAACTC	ATGAAAAAAT	GTATCGAATT	14820
AGCTCAAGAC	TTGGGAGTTC	GTACGATTCA	ATTAGCTGGT	TACGATGTTT	ACTATGAGGA	14880
AAAGTCACCC	CAGACACGCC	AACGTTTTAT	CAAAAATTTG	AGAAAAGCCT	GTGACTGGGC	14940
TGAAGAAGCT	CAGGTGGTAC	TTGCTATTGA	AATTATGGAT	GATCCTTTCA	TCAGTAGCAT	15000
CGAAAAATAT	TTGGCTATAG	AAAAGAGAT	TGACTCTCCC	TTCCTCTTTG	TATATCCAGA	15060
TATTGGTAAT	GTGTCTGCAT	GGCATAATGA	TATCTATAGT	GAGTTTTATC	TTGGTCATCA	15120
TGCCATCGCA	GCTCTCCATC	TCAAGGATAC	TTATGCAGTG	ACAGAAAGTT	CAAAGGGCCA	15180
GTTCCGAGAT	GTACCTTTTC	GGCAAGGTTG	TGTCAAATGG	GAAGAAGCTT	TCGATATTTT	15240
AAAGGAAACC	AATTATAATG	GACCTTTCCT	AATCGAAATG	TGGTCTGAAA	ATTGTGAAAC	15300
AGTAGAAGAA	ACACGCGCAG	CCATTCAAGA	GGCGCAAGCT	TTTCTCTATC	CACTCATTA	15360
GAAAGCAGGT	TTGATGTAAG	ATGAATCAAG	TAATCAATGC	TATGCGTAAA	CGAGTCTGTG	15420
ATGCCAATCA	ATCATTGCCA	AAACATGGAC	TTGTCAAATT	TACCTGGGGG	AATGTATCTG	15480
AAGTTAATCG	CGAACTCGGT	GTCATTGTTA	TCAAACCATC	AGGCGTGGAT	TATGACGAAT	15540
TGACACCTGA	AAACATGGTA	GTGACTGATC	TAGATGGTAA	GATCCTAGAA	GGGGATTAA	15600
GACCATCTTC	CGACCTCCCA	ACTCATGTGC	AATTATATAA	GACTTGGTCA	GAAATTGGTA	15660
GTGTGGTTCA	CACCCATTTC	ACAGAAGCTG	TTGGTTGGGC	TCAGGCAGGT	CGTGATATTC	15720
CTTCTACGG	AACAACCCAT	GCAGATTATT	TCTACGGTTC	AATCCCTTGC	GCCCGTAGTT	15780
TGACCAAGGA	CGAAGTAGAA	GTGGCCTATG	AAAAGATAC	TGGCCTGGTT	ATCGTAGAAG	15840

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AGTTTGAACA	TCGCGGACTT	AACCCGGTTG	AAGTACCAGG	AATTGTTGTA	CGCAATCACG	15900
GTCCATTTCAC	CTGGGGCAAA	AATCCAGAGA	ATGCTGTTTA	TCACTCTGTC	GTACTAGAGG	15960
AAGTATCAAA	GATGAATCGC	TTTACAGAAC	AAATCAATCC	AAGAGTTGGA	CCTGCTCCCC	16020
AGTACATACT	AGAAAAACAC	TACCAACGTA	AACATGGACC	AAATGCTTAT	TATGGTCAAA	16080
AGTAAGAACG	ATGAAGGAGG	AGAAAAAGAT	AAATTTAGCT	CCTCTTTTTA	CATTTGATTT	16140
TTATTGAGAG	TAAAGTTGGA	GTTGAAGTAA	TTTTAAAAGA	TTTTTTAGAA	ATAGCGCTTG	16200
ATATATATAT	GGTAAATATA	AAAGAATTGC	TGTGATATCA	ATAGATTTGG	GGGATTTTTT	16260
AATATGGTAC	TGGATAAGGC	AAGTTGTGAT	TTGCTTCAAT	ATTTGATGGA	TCAAGAAACG	16320
TCCAAAACGA	TTATGGCGAT	TTCGAAAGAT	TTGAAAGAGT	CAAGAAGGAA	AATTTATTAT	16380
CACATTGACA	AAATCAATGC	TGCTCTGGGT	GACGAGGCGC	TTCACATCAT	TAGTATTCCA	16440
CGAATTGGTA	TTCACTTAAC	GGAAGAGCAG	AGAGATGCTT	GTTGTAAACT	ATTATCGGAA	16500
GTAGATTCGT	ACGATTATAT	CATGAGTGCG	CATGAACGTA	TGATGATAAT	GTTACTATGG	16560
ATAGGTATTT	CTAAAGAACG	TATTACGATT	GAAAAATTGA	TAGAGTTAAC	AGAGGTATCT	16620
AGGAATACTG	TTCTCAATGA	TTTGAATAGT	ATTCGTTATC	AACTAACTTT	GGAACAATAT	16680
CAGGTGATCT	TGCAAGTGAG	CAAGTCACAG	GGATACAACC	TTCATGCCCA	CCCTCTTAAT	16740
AAAATTCAGT	ATCTTCAATC	GCTTCTATAT	CATATTTTTA	TGGAAGAAAA	TGCCACTTTT	16800
GTATCTATTT	TAGAAGATAA	GATGAAAGAG	AGGTTAGATG	ATGAGTGTTT	GCTTTCCTGT	16860
GAAATGAACC	AATTTTTTAA	GGAACAGGTT	CCTTTAGTTG	AACAAGATTT	AGGGAAGAAA	16920
ATAAACCATC	ATGAAATAAC	TTTTATGTTG	CAGGTTCTAC	CTTATTTGCT	GTTAAGCTGT	16980
CATAATGTTG	AACAGTATCA	AGAAAGACAT	CAGGATATAG	AGAAAGAATT	TTCTTTGATA	17040
AGAAAAAGAA	TAGAGTATCA	GGTGTCTAAG	AAATTAGGAG	AACGGTTGTT	TCAAAAAGTTT	17100
GAAATTTCTT	TGTCAGGACT	TGAAGTTTCT	CTTGTAAGCTG	TTCTCCTCCT	CTCCTATCGT	17160
AAAGATTTGG	ATATTCATGC	AGAAAGTGAT	GATTTTCGGC	AATTAAAAC	TGCTTTAGAA	17220
GAATTTATCT	GGTATTTTGA	ATCACAAATC	CGAATGGAGA	TTGAGAACAA	GGATGATTTG	17280
TTACGAAATT	TGATGATCCA	CTGTAAAGCC	TTGTTATTTA	GAAAGACTTA	CGGTATTTTT	17340
TCTAAAAATC	CTCTAACAAA	ACAAATTCGA	TCCAAGTATG	GAGAATTATT	TTTAGTCACT	17400
AGAAAATCTG	CGGAAATTTT	AGAAGGAGCA	TGGTTTATTC	GGCTAACAGA	CGATGATATT	17460
GCCTATTTGA	CGATTCATAT	TGGAGGATTT	TTAAAATATA	CACCATCATC	TCAAAAAAAT	17520
ATGAAAAAAG	TTTATCTCGT	TTGTGATGAA	GGTGTGCGG	TTTCGAGACT	TTTGCTGAAA	17580
CAATGCAAAC	TTTATTTTCC	AAATGAGCAA	ATTGACACTG	TATTTACAAC	AGAACAATTT	17640

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AAGAGTGTGG AAGATATTGC ACAAGTTGAT GTAGTGATTA CTACTAATGA TGATTTGGAT	17700
AGCAGATTTTC CGATTTTAAAG GGTAAATCCT ATCCTTGAAG CAGAAGATAT TTTGAAAATG	17760
CTAGACTATC TTAAACACAA TATATTTTCGT AATAAGAGCA AAAGTTTCAG TGAAAATCTT	17820
TCTAGTCTTA TTTCGTCTTA TATTGTAGAC AGCAAGTTGG CTAGTAAGTT CCAAGAAGAG	17880
GTTCAAACAC TTATAAATCA AGAAATAGTA GTTCAAGCTT TTTTGGAAGr TATTTGAAGG	17940
ACAGTCCAAT GATGAACACA AACCTGTGtT TTTCTGGTTC TTTTtTAGTG TTTTGAAGGG	18000
TGGkATACTA ATCTCAAAGA TAACAATTAT ATCCAAAGGA GGCAACATAT GCCAAACGTC	18060
AAAGAAATTA CAAGAGAGTC ATGGATTTTA GCCACTTTCC CAGAGTGGGG AACATGGTTG	18120
AACGAAGAAA TCGAAGAAGA AGTCGTACCT GAAGGCAACT TTGCCATGTG GTGGCTAGGC	18180
AACTGTGGTA CTTGGATTAA GACACCAGCT GGTGCTAACG TTGTCATGGA CCTTTGGTCA	18240
AACCGTGGAA AATCAACCAA AAAAGTGAAA GATATGGTTC GTGGGCACCA AATGGCAAAT	18300
ATGGCAGGTG TTCGTAAGCT GCAACCAAAC TTGCGTGTTT AGCCAATGGT TATCGATCCA	18360
TTTGCTATCA ACGAACTAGA CTATTACTTA GTTTCACACT TCCACAGTGA TCATATCGAC	18420
CCATACACAG CTGCAGCAAT TCTCAATAAT CCTAAGTTAG AGCATGTTAA GTTGG	18475

(2) INFORMATION FOR SEQ ID NO: 39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7186 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 39:

CCAGGATTTG GTACCGTTGC AAGTGGTGTG CCTTTCCTCC TAAAGGAAAA TGGAGGAAAA	60
ATCAATCAAT CAGCACATTC AGATATCAAA GTTGCTAAGG TATTGGTCAA GGATGAAGAT	120
GAAAAAATC GCTTGCTTGC AGCAGGGAAT GACTTTAACT TTGTAACCAA TGTGGATGAT	180
ATTTTATCAG ACCAGGATAT TACTATCGTA GTGGAATTGA TGGGGCGTAT TGAGCCTGCT	240
AAAACCTTTA TCACTCGTGC CTTGGAAGCT GGAAAACACG TTGTTACTGC TAACAAGGAC	300
CTTTTAGCTG TCCATGGCGC AGAATTGCTA GAAATCGCTC AAGCTAACAA GGTAGCACTT	360
TACTACGAAG CAGCAGTTGC TGGTGGGATT CCAATTCTTC GTACTTTAGC AAATTCCTTG	420
GCTTCTGATA AAATTACGCG CGTGCTTGGA GTAGTCAACG GAACTTCCAA CTTTCATGGTG	480
ACCAAGATGG TGGAAGAAGG CTGGTCTTAC GATGATGCTC TTGCGGAAGC ACAACGTCTA	540

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GGATTTGCAG AAAGCGATCC GACGAATGAC GTAGATGGGA TTGATGCAGC CTACAAGATG	600
GTTATTTTGA GCCAATTTGC CTTTGGCATG AAGATTGCCT TTGATGATGT AGCCCACAAG	660
GGAATCCGCA ATATCACACC AGAAGACGTA GCTGTAGCTC AAGAGCTTGG TTACGTAGTG	720
AAATTGGTTG GTTCTATTGA GGAAACTTCT TCAGGTATTG CTGCAGAAGT GACTCCAACC	780
TTCCTACCTA AAGCGCACCC ACTTGCTAGT GTGAATGGCG TAATGAACGC TGTCTTTGTA	840
GAATCTATCG GTATTGGTGA GTCTATGTAC TACGGACCAG GTGCGGGTCA AAAACCAACT	900
GCAACAAGTG TTGTAGCTGA TATTGTCCGT ATCGTTCGTC GTTTGAATGA TGGTACTATT	960
GGCAAAGACT TCAACGAATA TAGCCGTGAC TTGGTCTTGG CAAATCCTGA AGATGTCAAA	1020
GCAAACACT ACTTCTCAAT CTTGGCTCTA GACTCAAAAG GTCAGGTCTT GAAGTTGGCT	1080
GAAATCTTCA ATGCTCAAGA TATTTCCCTT AAGCAAATCC TTCAAGATGG CAAAGAGGGT	1140
GACAAGGCGC GTGTCGTTAT CATCACACAC AAGATTAATA AAGCCCAGCT TGAAAATGTC	1200
TCAGCTGAAT TGAAGAAGGT TTCAGAATTC GACCTCTTGA ATACCTTCAA GGTGCTAGGA	1260
GAATAAGATG AAGATTATTG TACCTGCAAC CAGTGCCAAT ATCGGGCCAG GTTTTGACTC	1320
GGTCGGTGTA GCTGTAACCA AGTATCTTCA AATTGAGGTC TGCGAAGAAC GAGATGAGTG	1380
GCTGATTGAA CACCAGATTG GCAAATGGAT TCCACATGAC GAGCGTAATC TCTTGCTCAA	1440
AATCGCTTTG CAAATTGTAC CAGACTTGCA ACCAAGACGC TTGAAAATGA CCAGTGATGT	1500
CCCTTTGGCG CGCGGTTTGG GTTCTTCCAG CTCGGTTATC GTTGCTGGGA TTGAACTAGC	1560
CAACCAACTG GGTCAACTCA ACTTATCAGA CCATGAAAAA TTGCAGTTAG CGACCAAGAT	1620
TGAAGGGCAT CCTGACAATG TGGCTCCAGC CATTTATGGT AATCTCGTTA TTGCAAGTTC	1680
TGTTGAAGGG CAAGTCTCTG CTATCGTAGC AGACTTTCCA GAGTGTGATT TTCTAGCTTA	1740
CATTCCAAAC TATGAATTAC GTACTCGCGA CAGCCGTAGT GTCTTGCCTA AAAAATTGTC	1800
TTATAAGGAA GCTGTTGCTG CAAGTTCTAT CGCCAATGTA GCGGTTGCTG CTTGTTGGC	1860
AGGAGACATG GTGACCGCTG GGCAAGCAAT CGAGGGAGAC CTCTTCCATG AGCGCTATCG	1920
TCAGGACTTG GTAAGAGAAT TTGCGATGAT TAAGCAAGTG ACCAAAGAAA ATGGGGCCTA	1980
TGCAACCTAC CTTTCTGGTG CTGGGCCGAC AGTTATGGTT CTGGCTTCTC ATGACAAGAT	2040
GCCAACAATT AAGGCAGAAT TGGAAAAGCA ACCTTTCAAA GGAAACTGC ATGACTTGAG	2100
AGTTGATACC CAAGGTGTCC GTGTAGAAGC AAAATAAAGA ATAGAAGATA GGATGGGGAA	2160
ACTCTTGACC AGAGGGGTTT ATATCCTTTT TGTGAAAAGA AGTTTATACT CAATGAAAAT	2220
CAAAGAGCAA ACTAGGAAGC TAGCCGCAGG CTGCTCAAAA CAGTGTTTTG AGGTTGCAGA	2280
TAGAACTGAC GAAGTCAGCT CAAGACACTG TTTTGAGGTT GCAGATAGAA CTGACGAAGT	2340

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CAGTAACCAT	ACTACGGTAA	GGTGACGCTG	ACGTGGTTTG	AAGAGATTTT	CGAAGAGTAT	2400
TAGTTAAAAA	CGTGATAAAG	GAGAAATAAA	GATGGCAGAA	ATTTATCTAG	CAGGTGGTTG	2460
TTTTTGGGGC	CTAGAGGAAT	ATTTTTCACG	CATTTCTGGA	GTGCTAGAAA	CCAGTGTGG	2520
CTACGCTAAT	GGTCAAGTCG	AAACGACCAA	TTACCAGTTG	CTCAAGGAAA	CAGACCATGC	2580
AGAAACGGTC	CAAGTGATTT	ACGATGAGAA	GGAAGTGTC	CTCAGAGAGA	TTTTACTTTA	2640
TTATTTCCGA	GTTATCGATC	CTCTATCTAT	CAATCAACAA	GGGAATGACC	GTGGTCGCCA	2700
ATATCGAACT	GGGATTTATT	ATCAGGATGA	AGCAGATTTG	CCAGCTATCT	ACACAGTGGT	2760
GCAGGAGCAG	GAACGCATGC	TGGGTCGAAA	GATTGCAGTA	GAAGTGGAGC	AATTACGCCA	2820
CTACATTCTG	GCTGAAGACT	ACCACCAAGA	CTATCTCAGG	AAGAATCCTT	CAGGTTACTG	2880
TCATATCGAT	GTGACCGATG	CTGATAAGCC	ATTGATTGAT	GCAGCAAAC	ATGAAAAGCC	2940
TAGTCAAGAG	GTGTTGAAGG	CCAGTCTATC	TGAAGAGTCT	TATCGTGTCA	CACAAGAAGC	3000
TGCTACAGAG	GCTCCATTTA	CCAATGCCTA	TGACCAAACC	TTTGAAGAGG	GGATTTATGT	3060
AGATATTACG	ACAGGTGAGC	CACTCTTTTT	TGCCAAGGAT	AAGTTTGCTT	CAGGTTGTGG	3120
TTGGCCAAGT	TTTAGCCGTC	CGATTTCCAA	AGAGTTGATT	CATTATTACA	AGGATCTGAG	3180
CCATGGAATG	GAGCGAATTG	AAGTTCGTTC	TCGTTCAGGC	AGTGCTCACT	TGGGTCATGT	3240
TTTCACAGAT	GGACCGCGGG	AGTTAGGCGG	CCTCCGTTAC	TGTATCAATT	CTGCTTCTTT	3300
ACGCTTTGTG	GCCAAGGATG	AGATGGAAAA	AGCAGGATAT	GGCTATCTAT	TGCCTTACTT	3360
AAACAAATAA	AACAGAGAGT	GGGGCTTCCC	ACTTTCTTCA	TTTCTAGAA	ATGAATAGAA	3420
GGGATTTATG	AAACACCTAT	TATCTTACTT	CAAACCCTAC	ATCAAGGAAT	CAATTTTAGC	3480
CCCCTTGTTT	AAGCTGTTAG	AAGCTGTTTT	TGAGCTCTTG	GTTCCCATGG	TGATTGCTGG	3540
GATTGTTGAC	CAATCTTTAC	CTCAGGGAGA	TCAAGGTCAT	CTCTGGATGC	AGATTGGCCT	3600
GCTCCTTATC	TTTGCAGTAA	TTGGCGTTTT	AGTGGCCTTG	ATAGCTCAAT	TTTACTCAGC	3660
AAAGGCAGCA	GTAGGTTCTG	CTAAGGAATT	GACAAACGAT	CTTTATCGTC	ATATTCTTTC	3720
CTTGCCCAAG	GACAGCAGAG	ACCGTCTGAC	AACTTCTAGT	TTGGTCACTC	GCTTGACTTC	3780
GGATACCTAC	CAGATTCAGA	CTGGTATCAA	TCAATTCCTG	CGTCTCTTTT	TACGAGCGCC	3840
CATTATCGTT	TTTGGTGCCA	TTTTTATGGC	TTATCGAATC	TCAGCTGAGT	TGACTTTCTG	3900
GTTCTTAGTC	TTGGTTGCCA	TTTTGACCAT	TGTCATTGTA	GGGTTATCTC	GATTGGTCAA	3960
TCCTTTCTAC	AGTAGTCTCA	GAAAGAAAAC	GGACCAACTG	GTTTCAGGAAA	CGCGCCAGCA	4020
ATTGCAAGGG	ATGCGGGTTA	TTCGTGCTTT	TGGTCAAGAA	AAACGAGAGT	TACAGATTTT	4080

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TCAAACCCTT	AACCAAGTTT	ATGCTAGATT	ACAAGAAAAG	ACAGGTTTCT	GGTCTAGTTT	4140
ATTAACACCT	CTGACCTATC	TGATTGTCAA	TGGAACCTCT	CTCGTTATTA	TCTGGCAAGG	4200
CTATATTTCA	ATTCAAGGAG	GAGTGCTCAG	TCAAGGTGCT	CTCATTGCTC	TTATCAATTA	4260
CCTCTTACAG	ATTTTGGTGG	AATTGGTCAA	GCTAGCCATG	TTGATCAATT	CCCTCAACCA	4320
GTCCTATATC	TCAGTCAAGC	GAATCGAGGA	AGTCTTTGTT	GAGGCTCCAG	AGGATATCCA	4380
TTCAGAGTTA	GAACAAAAGC	AAGCTACCAG	AGATAAGGTT	TTACAAGTCC	AAGAATTGAC	4440
CTTTACCTAT	CCTGATGCGG	CCCAGCCTTC	TCTGAGATAC	ATTTCCCTTG	ATATGACTCA	4500
AGGACAAATT	CTAGGTATCA	TCGGGGGAAC	TGGTTCTGGT	AAATCAAGCT	TGGTGCAACT	4560
CTTACTTGGA	CTTTATCCAG	TAGACAAGGG	GAACATTGAC	CTTTATCAAA	ATGGACGTAG	4620
TCCTCTTAAT	TTGGAGCAGT	GGCGGTCTTG	GATTGCCTAT	GTACCTCAAA	AGGTCGAACT	4680
CTTTAAAGGA	ACCATTCGTT	CCAAGTTGAC	TCTAGGTTTC	AATCAAGAAG	TATCTGACCA	4740
GGAAGTCTGG	CAGGCCTTGG	AGATTGCGCA	AGCTAAGGAT	TTTGTGAGTG	AAAAGGAAGG	4800
ACTCTTGAT	GCTCTAGTTG	AGGCAGGGGG	GCGAAATTTT	TCAGGTGGAC	AAAAACAAAG	4860
ATTGTCTATC	GCCCCAGCAG	TCTTGCGCCA	GGCTCCGTTT	CTCATCCTAG	ATGATGCAAC	4920
CTCGGCACTG	GATACCATTA	CAGAGTCCAA	GCTCTTGAAA	GCTATTAGAG	AAAATTTTCC	4980
AAACACGAGC	TTAATTTTGA	TCTCTCAACG	AACCTCAACT	TTACAGATGG	CGGACCAGAT	5040
TCTCCTCTTG	GAAAAAGGTG	AGTTGCTAGC	TGTTGGCAAG	CACGATGACT	TGATGAAATC	5100
CAGCCAAGTC	TATTGTGAAA	TCAATGCATC	CCAACATGGA	AAGGAGGACT	AGAATGAAAC	5160
GACAACTGT	AAACCAGACG	CTCAAACGTT	TAGCCGTAGA	TTTAGCAAGC	CATCCTTTCC	5220
TCCTTTTCCT	AGCCTTTCTA	GGAAGTATTG	CCCAAGTTGG	CTTATCAATT	TACCTACCTA	5280
TTCTGATTGG	GCAGGTCATT	GACCAAGTCC	TAGTGGCTGG	TTTCATCACC	GTTTTTTGGC	5340
AGATTTTTCT	CCAGATGCTC	TTGGTGGTAA	TAGGAAATAC	TCTGGTACAA	TGGGCCAATC	5400
CTCTCCTCTA	TAATCGTCTA	ATCTTCTCTT	ATACCAGAGA	TTTACGGGAG	CGAATCATCC	5460
ATAAGCTCCA	TCGTTTACCG	ATTGCCTTTG	TAGATAGGCA	AGGTAGTGGA	GAGATGGTTA	5520
GTCGTGTAAC	CACGGACATC	GAACAGTTGG	CAGCTGGCTT	GACCATGATT	TTTAACCAAT	5580
TTTTTCATTGG	TGTTTTGATG	ATTTTGGTCA	GTATTCTAGC	CATGCTCCAA	ATTCATCTCC	5640
TCATGACTCT	CTTAGTCTTG	CTGTTGACGC	CACTGTCCAT	GGTGATTTCA	CGCTTTATTG	5700
CCAAGAAATC	CTATCATCTC	TTCCAGAAGC	AAACAGAGAC	GAGGGGAATT	CAGACTCAGT	5760
TGATTGAAGA	ATCGCTTAGT	CAGCAGACTA	TAATCCAGTC	CTTCAATGCT	CAAACAGAAT	5820
TTATCCAAAG	ATTGCGTGAG	GCTCATGACA	ACTACTCAGG	CTATTCTCAG	TCAGCCATCT	5880

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TTTATTCTTC AACGGTCAAT CCTTCGACTC GCTTTGTAAA TGCACTCATT TATGCCCTTT	5940
TAGCTGGAGT AGGAGCTTAT CGTATCATGA TGGGTTTCAGC CTTGACCGTC GGTCGTTTAG	6000
TGACTTTTTT GAACTATGTT CAGCAATACA CCAAGCCCTT TAACGATATT TCTTCAGTGC	6060
TAGCTGAGTT GCAAAGTGCT CTGGCTTGCG TAGAGCGTAT CTATGGAGTC TTAGATAGCC	6120
CTGAAGTGGC TGAAACAGGT AAGGAAGTCT TGACGACCAG TGACCAAGTT AAGGGAGCTA	6180
TTTCCTTTAA ACATGTCTCT TTTGGCTACC ATCCTGAAAA AATTTTGATT AAGGACTTGT	6240
CTATCGATAT TCCAGCTGGT AGTAAGGTAG CCATCGTTGG TCCGACAGGT GCTGGAAAAT	6300
CAACTCTTAT CAATCTCCTT ATGCGTTTTT ATCCCATTAG CTCGGGAGAT ATCTTGCTGG	6360
ATGGGCAATC CATTTATGAT TATACACGAG TATCATTGAG ACAGCAGTTT GGTATGGTGC	6420
TTCAAGAAAC CTGGCTCACA CAAGGGACCA TTCATGATAA TATTGCCTTT GGCAATCCTG	6480
AAGCCAGTCG AGAGCAAGTA ATTGCTGCTG CCAAAGCAGC TAATGCAGAC TTTTTCATCC	6540
AACAGTTGCC ACAGGGATAC GATACCAAGT TGGAAAATGC TGGAGAATCT CTCTCTGTCG	6600
GCCAAGCTCA GCTCTTGACC ATAGCCCGAG TCTTTCTGGC TATTCCAAAG ATTCTTATCT	6660
TAGACGAGGC AACTTCTTCC ATTGATACAC GGACAGAAAGT GCTGGTACAG GATGCCTTTG	6720
CAAACTCAT GAAGGGCCGC ACAAGTTTCA TCATTGCTCA CCGTTTGTCA ACCATTCAGG	6780
ATGCGGATTT AATTCTTGTC TTAGTAGATG GTGATATTGT TGAATATGGT AACCATCAAG	6840
AACTCATGGA TAGAAAGGGT AAGTATTACC AAATGCAAAA AGCTGCGGCT TTTAGTTCTG	6900
AATAAGCCAT TCTCTTTTGA AAGTTTATGG ACGAAAAAAG TTGCCTTCGA GTGACTTTTT	6960
TGTTACAATA GCTAGAAAAA TTGTTCACTG TAATACTCAA TGAAAATCAA AGAGCAAAC	7020
AGGAAGCTAG CCGTAGGTTG CTCAAAGCAC AGCTTTGAGG TTGTAGATAA GACTGACGAA	7080
GTCAGTTCAA AACACTGTTT TGAGGTTGCA GATAGAACTG ACGAAGTCAG CTCAAACAC	7140
TGTTTTGAGG TTGCAGATAG AACTGACGAA GTCAGCTCAA AACAGG	7186

(2) INFORMATION FOR SEQ ID NO: 40:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14273 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 40:

CTGAAAATTC TAAAAAATTT ATAAGTAAGG AATTAATTAG TTATTTTTGT GATAAAGTTT	60
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ATGATGAAAT	ATTTGTTGAA	GAGGTAGTTC	CGCACGTTTT	TCTGCCATAT	GAATCTGACT	120
TACTTCTTAT	TTTACCAGCT	ACGGCAAATG	TGATTGGCAA	AATTGCTAAT	GGTATTGCTG	180
ATGATTTAGT	TACAGCAACT	GTTTTAAACT	TTAATAAAAA	AATAATTTTT	TGTCCCAATA	240
TGAACTCTAC	TATGTGGGAC	AATCACATAG	TTCAAAGAAA	TGTATCAATT	CTAAAGGAGT	300
TGGGACATAT	ATTTTTATTT	GAGTCTAAAA	AAACATATGA	GGTAGGATTG	CGTAAAGCAA	360
TAGATTCAAC	ATGTTCAATG	TTACAACCAC	AGTCGTTAGT	AAAAGAACTT	ATCAAATTAG	420
AAAATATTGT	CCTTGAAGAG	GGACATTAAA	AACTACTGAG	AATATTAATG	AGGGGAAAAA	480
ATGGAAAATT	CATCAATCGA	TGTAGATATG	CTGTTGGAAG	AATTGACACA	AGAAGCAATG	540
GTCGTTGTTG	CTGTTGATAA	GGACTGTAA	TTTAAACTTA	TGGCAATATA	TGAAAGGTTA	600
CTGGATGTTT	TAAATTATGC	AGGCAGTAGC	CTTTTATTAT	ATACAAATGG	ATAAAGTAAG	660
GATAATACAA	TGATTAATAA	AAAAATACAA	CAAGTTGTTT	TGGAATCATT	ACAGAATTTT	720
TTGAATGGGA	ACTTCATTTT	GCCTTGTTGA	GTCTATGATT	TTGGCTTGCT	GGAAACTGTA	780
CTTGATGAAT	TTAAAAATCA	AATTCCTGTA	ACATTCAATT	ACCAACTTTT	TTATGCCGTT	840
AAAGCAAATT	CAAATGAGAA	GATACTTGAA	TTCTTAGTAG	ATAAAATTGA	TGGAGTTGAT	900
GTGGCGTCAT	TATCTGAATT	AGATGTGGCT	AAAAAATTTT	TCCCACCAAC	TCAAATTTCT	960
GTTAATGGTC	CCGCATTTTC	TTATGAAACT	TTATATAATC	TGATTAAAAA	ACAATATAAA	1020
GTTGATATTA	ACTTTTTTGA	ACATCTTCAA	CAATTTTCCC	CAAAGAATC	TGTTGGAATA	1080
AGAGTAACGG	AGCCAGATGA	ACTTAATAAT	CGTATGAGTC	GATTTGGAAT	AAATATTTGC	1140
AGTGATAATT	GGACTAGTAA	TTTACAAAAT	CCTTTAATTA	CACGACTGCA	TTTTTCATTTT	1200
GGAGAAAAAG	ATGATAAATT	TATTGTAAAG	TTAGATAAAA	TATTATTTAA	GTTACAAGAA	1260
ATTAATAAAC	TTAGAGAGGT	TAGAGAAATA	AATCTTGGAG	GCGGTTTTAT	GAAATTATTT	1320
ATGGAAAATC	GTTTGAAAGA	ATTTTTTCTA	TCACTTATGG	AAATCTATAA	AAAGTACGAT	1380
ATTGATAGTA	CTGTGACTAC	AATAATAGAA	CCAGGTAGTG	CAATTACTTC	ATTTTCTGCC	1440
TATATGATTA	CTAGCCCAGT	TAATGTTAGT	GAGGTGAATG	AGCAGCAGGT	TATCACGTTA	1500
GACACATCAA	TATACACCAA	TACATTATGG	TTTGTTCCGC	ATATTATTAC	AACGTTAAAT	1560
TCAAGTAGTA	AAGAGCGTTA	TAGTACTATT	CTCTATGGTA	ATACCTGTTA	TGAACATGAC	1620
AAGTATAAAA	TGAAAGTTTC	GCTTCCAAGG	TTAACTCAAA	ATAGCAGTAT	AGTGTTTTTT	1680
CCTGTAGGAG	CTTATATAAA	AAGCAATCAT	TCAAATTTAC	ATCGTAATGA	TTTTATGCGG	1740
GAGGTATATT	TGTGGACAAA	AACTTGACA	TATTAGATAA	AGTTAAGGAA	TATTTAGGAA	1800
ATAAACTAC	TCAAATTCTG	GATAATCAAT	ATAAAGAATT	TTTGAAACTT	AATGATATAA	1860

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GGCGAGCGTT	TGGTATTTCA	GAAAAAGTAT	TAAACAATTC	TTTAAATTTT	ACGAGTAAAG	1920
AATTTAATGA	TTTAATTAAT	AACGAAAATT	ATTTATTCGA	ATATGCATGT	AGAATTAGAG	1980
AGGAATGGAG	AAAAAAATGC	TTTAATCATT	CTTATCGTTT	TCTATGCTCA	CCTATAATTA	2040
CAGATGATTT	TCTTAACACG	AAGACATTGA	GAAGTAGCCA	AATTGAATAT	AAATATGAGC	2100
GATATTTATC	GAAAAGTTCG	ATAGGCGATA	GAGCGGTTGA	TGGCTTTGTT	TCCTTCAATA	2160
CTTTAACAGC	TAATGGTATG	TCTGCTATTA	AACTATGTCT	TGAGATATTA	AACTCTATTT	2220
TCTTCAAGAA	GAAGATTGAT	TTATTATATT	CAACCGGATA	TTATGAAACA	AGATTTTAT	2280
TAAATAATCT	TGCTAAATCA	GGTATTAGTT	GCTATGAGGT	AAGTAATTGT	GAATTGGATA	2340
AAGATAAATT	TTATAATGTA	TTCATGATGG	AACCCAATCG	AGCCGATTTA	ACATTACAAA	2400
AAACTGATTT	CAAGATAGTA	GAATATTTTG	TTAAGTATAA	AAATAATTCA	ATAAAAGTCG	2460
TTATTTTAGA	TATTTTCATAT	CAAGGTTCTA	ATTTTAAATT	AGTAGAATTT	TTAGAGAAAT	2520
TTAAATTTGC	GAATGTAATT	ATTTTTGTGG	TACGATCTTT	GATAAAATTA	GATCAAATGG	2580
GATTAGAATT	GACAAATGGG	GGAATAATAG	AAGTGTTTAT	TCCTAATCAT	TTGAGAAAGT	2640
TGAAAAATTT	TATTGAAGAG	GAATTCAATA	AATTTAGAAA	TTCTCACGGA	GCTAATCTAA	2700
GCCTCTATGA	ATACTGTTTG	CTTGATAATT	CTTTAACTTT	AAAAAATGAT	TGGAACTATT	2760
CTGATTTAGT	TATGAAATTT	ACGAGTAATT	TTTATGCTGA	TATAAAAGAC	TTGTTCATGG	2820
AAAATTCTGA	TATTGAAATC	ATCCATGAAG	AGGGAGTACC	TTTTGTATTT	TTAGATTTAA	2880
TAGGTGAAGG	TAAAAAAGAA	TATGAAATGT	TTTTTCAATG	GTAAACTTC	TTTTACAAAC	2940
AGCTTGGAAT	CACATTGTAT	GCTAGAAATA	GTTTTGGGTT	TCGGAATCTA	ACAGTAGAGT	3000
ATTTTGGAAT	TATTGGGACA	GAAAGATATA	TATTTAAGAT	TTGTCCAGGT	GTTTATAAAG	3060
GGTTAAGTTA	TTATTTGATG	AAATTTTAT	TAAAATCTTT	TTCAAATGAA	TATTTAAAAA	3120
CTACTGATGA	GGTTAATAGA	TGAAAAATTT	GATAAAGTTG	CTAATAATTA	GATTGATTGT	3180
TAACCTAGCA	GACAGTGTAT	TTTATATAGT	AGCATTGTGG	CACGTTAGCA	ATAATTATTC	3240
TTTCGAGCATG	TTCTTAGGAA	TATTTATTGC	AGTAAATTAT	CTACCGGATT	TGTTACTAAT	3300
CTTTTTTGGA	CCAGTTATTG	ACAGAGTAAA	TCCGCAAAAA	ATTCTTATAA	TATCAATTTT	3360
GGTTCAATTA	GCAGTGGCTG	TAATATTTTT	ATTATTATTA	AACCAAATAT	CATTTTGGGT	3420
GATAATGAGT	CTAGTGTTTA	TTTCAGTAAT	GGCTAGCTCC	ATAAGTTACG	TGATAGAAGA	3480
TGTGTTGATT	CCTCAAGTGG	TAGAATATGA	TAAGATTGTA	TTTGCAAATT	CTCTTTTATG	3540
TATTTTCGTAT	AAAGTATTAG	ATTCTATTTT	TAATTCATTC	GCATCATTTT	TACAGGTGGC	3600

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AGTAGGATTT	ATTTTATTGG	TTAAGATAGA	TATAGGCATA	TTTTTACTTG	CTCTATTTAT	3660
ATTGTTGTTG	TTAAAATTTA	GAAC TAGCAA	TGCGAATATA	GAAAAC TTCT	CTTTCAAATA	3720
TTACAAGAGA	GAAGTGTTGC	AAGGTACAAA	GTTTATTTTA	AATAATAAAT	TATTATTTAA	3780
AACCAGTATT	TCTTTAACGC	TTATAAACTT	TTTTTATTCA	TTTCAGACAG	TAGTTGTACC	3840
GATTTTTTCT	ATTCGATATT	TTGATGGTCC	GATTTTTTTAT	GGTATTTTTT	TAAC TATTGC	3900
TGGTTTGGGT	GGTATATTGG	GAAATATGCT	AGCGCCAATC	GTAATAAAAT	ATTTAAAATC	3960
GAATCAAATT	GTTGGTGTAT	TTCTTTTTTT	GAACGGCTCA	AGTTGGTTAG	TAGCAATTGT	4020
TATAAAAGAC	TATACTTTAT	CACTTATTTT	ATTTTTTCGT	TGTTTTATGT	CTAAAGGAGT	4080
CTTCAATATT	ATTTTAAATT	CGTTGTACCA	ACAAATACCT	CCACATCAAC	TTCTTGGTAG	4140
GGTAAATACT	ACCATTGATT	CTATTATTTT	TTTTGGAATG	CCAATTGGTA	GTTTAGTTGC	4200
AGGAACGCTT	ATTGATTTGA	ATATTGAATT	AGTGTTAATT	GCTATTAGCA	TACCTTATTT	4260
TTTGTTTTCT	TATATTTTTT	ATACGGATAA	TGGATTGAAA	GAATTTAGTA	TATATTAGAA	4320
ATGTTTATGT	TCATTCAAAA	GCATAATGAC	TATAACTGAA	AAAGAAAAGT	GATATCTTTA	4380
AGGTTGTTCT	TCTTGGTGGT	GAGATTCGTG	AGACAACCCA	AGCTTTTGTC	GGAAAGATTA	4440
CCAATGCTTT	GATGGATAGG	ATGTACTTTA	GCAAGATGTT	TTTAGTGGTA	ACGGTATCGT	4500
GGATGGACGT	GTAATAACCT	CTTCTTTCTG	GGAGTATTTT	ACTAAAAAAC	TAGCCTTGGA	4560
GCGTTCCCCA	GAAACGGACT	TACTCATTGA	CTCTTCAAAG	ATTTGGGGAG	AAGATTTTGC	4620
TTCATCTGTT	CCTTGAAAAA	AGTCACAGCA	GTCATCACAG	ACGATAGTAC	TGAACAAAAC	4680
TATGAAGAGT	TAGAAATTTA	TACGCAGGTG	ATTGTATAAA	GGATCTGGAA	ATAGATAAGA	4740
AGTTGATTAG	TATTGACCTA	GGTGGTACAA	ATATTAAGAT	TACTGTTCTT	TCAAATGACG	4800
GTGAGATTGA	AACTTTGTGG	AGTATTACAA	CAGATACAAG	TGAGAAAGGT	TCTCAAATTA	4860
TATCGGACAT	CATCAGTTCT	ATTAAAAATA	AATTGACCGA	ACGGAATATT	CCTGATAGCG	4920
ACCTTCTTGG	AATCGGTATG	GGAAGTTGCT	CATCATACTT	TCCTTGTAAG	TCATAGGGGC	4980
TATAAACTCT	CCGTCTACTT	GTCCTGCAAC	AATTGAAGTC	TGCTCAAAAC	GCCGTCCGCT	5040
AATCTTTTCA	TAGACTTTCT	CCCTTTTAGG	AGCCTAGCTT	TCTAGTTTGT	TCTTTGATTT	5100
TTATTGAGTA	TACCACTATT	TTACTCCCTC	TGGCAAGGGA	CTTTGTCTAT	GTGGAGGGAT	5160
TGGGCTCCTA	TGTGGTGGAG	CTTTTCTGTT	CTTTCTGAAA	TATGGTATAA	TAGCACTAAT	5220
CAATTTCTAG	GAAAATAGAT	ACAGAAAGGG	GCTGAAAGAT	GTCTCATATT	ATTGAATTGC	5280
CAGAGATGCT	GGCAAACCAA	ATCGCGGCTG	GAGAGGTCAT	TGAACGTCCT	GCCAGTGTGG	5340
TCAAAGAGTT	GGTAGAAAAT	GCCATTGACG	CGGGCTCTAG	TCAGATTATC	ATTGAGATTG	5400

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AGGAAGCTGG	TCTCAAGAAG	GTTCAAATCA	CGGATAACGG	TCATGGAATT	GCCCACGATG	5460
AGGTGGAGTT	GGCCCTGCGT	CGCCATGCGA	CCAGTAAGAT	AAAAAATCAA	GCAGATCTCT	5520
TTCGGATTCG	GACGCTTGGT	TTTCGTGGTG	AAGCCTTGCC	TTCTATTGCG	TCTGTTAGTG	5580
TCTTGACTCT	GTTAACGGCG	GTGGATGGTG	CTAGTCATGG	AACCAAGTTA	GTGCGCGGTG	5640
GGGGTGAAGT	TGAGGAAGTC	ATCCCAGCGA	CTAGTCCTGT	GGGAACCAAG	GTTTGTGTGG	5700
AGGATCTCTT	TTTCAACACG	CCTGCCCCGT	TCAAGTATAT	GAAGAGCCAG	CAAGCGGAGT	5760
TGTCTCATAT	CATTGATATT	GTCAACCGTC	TGGGCTTGGC	CCATCCTGAG	ATTTCTTTTA	5820
GCTTGATTAG	TGATGGCAAG	GAAATGACGC	GGACAGCAGG	GACTGGTCAA	TTGCGCCAAG	5880
CAATCGCAGG	GATTTACGGT	TTGGTCAGTG	CCAAGAAGAT	GATTGAAATT	GAGAACTCTG	5940
ACCTAGATTT	CGAAATTTCA	GGTTTTGTGT	CCTTGCCTGA	GTTGACTCGG	GCTAACCGCA	6000
ATTATATCAG	CCTCTTCATC	AATGGCCGTT	ATATTAAGAA	CTTCCTGCTC	AATCGTGCTA	6060
TTTTGGATGG	TTTTGGAAGC	AAGCTTATGG	TTGGACGTTT	TCCACTGGCT	GTCATTCACA	6120
TCCATATCGA	CCCTTATCTA	GCGGATGTCA	ATGTGCATCC	AACTAAGCAA	GAGGTGCGGA	6180
TTTCCAAGGA	AAAAGAACTG	ATGACTCTGG	TTTCAGAAGC	TATTGCAAAT	AGTCTCAAGG	6240
AACAAACCTT	GATTCCAGAT	GCCTTGGAAG	ATCTTGCCAA	ATCGACCGTG	CGCAATCGTG	6300
AGAAGGTGGA	GCAAACCTATT	CTCCCACTCA	AAGAAAATAC	GCTCTACTAT	GAGAAAACCTG	6360
AGCCGTCAAG	ACCTAGTCAA	ACTGAAGTAG	CTGATTATCA	GGTAGAATTG	ACTGATGAAG	6420
GGCAGGATTT	GACCCTGTTT	GCCAAGGAAA	CCTTGACCGG	ATTGACCAAG	CCAGCAAAAC	6480
TGCATTTTGC	AGAGAGAAAG	CCTGCTAACT	ACGACCAGCT	AGACCATCCA	GAGTTAGATC	6540
TTGCTAGCAT	CGATAAGGCT	TATGACAAAC	TGGAGCGAGA	AGAAGCATCC	AGCTTCCCAG	6600
AGTTGGAGTT	TTTCGGACAA	ATGCACGGGA	CTTATCTCTT	TGCCCAAGGG	CGAGATGGAC	6660
TTTACATCAT	AGATCAGCAC	GCTGCTCAGG	AACGGGTCAA	GTACGAGGAG	TACCGTGAAA	6720
GCATTGGCAA	TGTTGACCAA	AGCCAGCAGC	AACTCCTAGT	GCCCTATATC	TTTGAATTTT	6780
CTGCGGATGA	TGCCCTGCGT	CTCAAGGAAA	GAATGCCTCT	CTTAGAGGAA	GTGGGCGTCT	6840
TTCTAGCAGA	GTACGGAGAA	AATCAATTTA	TTCTACGTGA	ACATCCTATT	TGGATGGCAG	6900
AAGAAGAGAT	TGAATCAGGC	ATCTATGAGA	TGTGCGACAT	GCTCCTTTTG	ACCAAGGAAG	6960
TTTCTATCAA	GAAATACCGA	GCAGAGCTGG	CTATCATGAT	GTCTTGCAAG	CGATCTATCA	7020
AGGCCAATCA	TCGTATTGAT	GATCATTCAG	CTAGACAACT	CCTCTATCAG	CTTTCTCAAT	7080
GTGACAATCC	CTATAACTGT	CCTCACGGAC	GTCCTGTTTT	GGTGCATTTT	ACCAAGTCGG	7140

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ATATGGAAAA	GATGTTCCGA	CGTATTCAGG	AAAATCACAC	CAGTCTCCGT	GAGTTGGGGA	7200
AATATTAAAA	GTATAAAAAA	GTCTGGGAAA	AATTTTCAAA	ATCAAAAAAA	CGCATAAAAT	7260
CAGGTGTTCA	AAAACCTTGA	TTTTATGCGT	TTTATCATGG	AAATAGTTAC	TTCATTTTTT	7320
CCTAATTCTT	TTCGAAACTC	TTTTTAAACG	ACGTCAGTTT	TATCAGTAAT	CTCAAAACAG	7380
TGTTTTGAGC	TAATTTTGCC	AGTTTTGTCT	GTAACATCGA	AGTTGTGTTT	TACCACTCTG	7440
CGACTGGTTT	CCTAGTTTGC	TCTATGATTT	TCACAGAGCA	TTAAATTGCG	ATTTTGCCAA	7500
GTTTCTTTAT	TCGTCTAAAA	GTAGAGTCTG	TTCTATGCGT	CTAATGTACG	AATCAGGTTG	7560
ACCATTTCAA	TAGCTCCTTG	TGCACACTCA	GAACCCTTAT	TTCTGCTTTT	AGTACCAGCT	7620
CGTTCTATGG	CTTGTTCAAT	TGTATCTGTC	GTTAGCACAC	CAAACATAAC	AGGAATTTCCG	7680
CTATTTAAAC	TGATTTGGGC	GATTCCCTTA	GATACCTCGC	TACATACATA	ATCATAATGA	7740
CTTGATATTCC	CTCTAATGAC	AGCTCCCAAG	CAGATAATTG	CATCATATTT	TTTACTTTTTT	7800
GCCATTTTTG	ATGCAATCAG	TGGTATTTCA	AAAGCTCCTG	GAACCCAGGC	TACCTCTATA	7860
TCTTTCTCGT	TTACATTCTC	TCTTTTGAGA	TTATCTAGTG	CTCCAGATAA	TAATTTTGAA	7920
GTTATAAATT	CATTAAATCT	CGCTACAACA	ATACCTATTT	TAATATTGTT	TGCTACTAAA	7980
TTACCTTCAT	AAGTGTTTAT	TTATTTTTCC	TCCATATTTA	AAATGTGACC	CATTCGATTT	8040
TTCTTTGTTT	CTAAATAAAA	ACTATCGTAA	GGATTGGCTT	CTATTTGATG	TGATATTCTA	8100
CTGGAAATGG	TAATTCCATA	TTTTTCTAAC	TGTTCAACCT	TGTCAGGATT	ATTTGTCAGT	8160
AAATGAAGTG	ACTGAAGTCC	CAGATCTTTA	AGCATTTTTG	CTCCAATATG	ATATTCTCTT	8220
AAATCACCTT	CAAAGCCTAA	TGCAAGATTG	GCATCAAGCG	TATCCATGCC	TTGATCTTGT	8280
AAATGATAGG	CTTTTAATTT	ATTGATAAGT	CCAATTCCTC	GTCCCTCCTG	TCGCAAGTAA	8340
AGTAAGACAC	CCGAACCATT	CTCAACAATC	ATTTTCATAG	CCTTATCGAA	TTGCTGTCCA	8400
CAATCGCAAC	GTAAAGAGCC	TAAAACATCT	CCTGTTAAAC	ATTCGGAGTG	GACCCGACAT	8460
AATACATTGG	CTTCATCCTC	TATATTTCCC	ATAATAAGAG	CAAGATGATG	TTCCCCATTT	8520
AGTTTATCTA	TATAGCTAAT	TGCTTTGAAA	TTACCGTATC	TAGTAGGCAT	ATTGACAGTT	8580
GAAACTCGTT	CTACCAGCTG	ATCATATACT	TTTCTATATT	CTTGTAATTC	TTTGATGGTA	8640
ATTAGTGGA	TGTTGTGTTT	TTTCGAGAAC	TGAATTAAAT	CATCTGTTCT	CATCATTTTG	8700
CCATCATGAT	TCATTATTTT	ACAACATAGG	CCACACTCTT	TTAGTCCAGC	TAATTTTAAT	8760
AAATCAACAG	TTGCTTCTGT	GTGTCCATTT	CTTCTAGGA	CACCACCTTT	TTTTGCAATT	8820
AAAGGAAACA	TGTGTCCTGG	CCTGCGAAAA	TCAGAGGGTG	TTATATCTTC	AGCTACACAC	8880
ATACGTGCGG	TCAGTCCTCT	TTCTCGGCA	GAAATACCTG	TGGTCGTTTC	TTTATAATCA	8940

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ATTGAAACTG	TAAAAGCAGT	CTTATGATTA	TCTGTATTGT	TTTCAACCAT	AGGTGAAAGC	9000
ATTAATTGAT	TAGCTAAACT	TTGCTCATA	GGCATAAAA	TTAATCCTTT	GGCATAAGTA	9060
GCCATAAAAT	TAACATTTTC	TGTTGTAGCT	GCTTGTGCAG	AACAAATTAA	GTCTCCTTCA	9120
TTTTCTCTAT	CCTTGTCGTC	TATAACAAGA	ACAAGTCGTC	CCTTCTGCAA	TGCTTCTAAT	9180
GCTTCTTGTA	TTTTTCGATA	TTCCATTGAC	TGATTATCCT	TTCTGCTAAA	ATCCATTTTG	9240
ATATAATAGT	TCCTTAGATA	TTTCTGATTT	TGGAGAGTTA	TCCATCAGTT	TTTGACACATA	9300
TTTACCTAAG	ATATCATTTT	CAAGATTTAC	TGTACTCCCG	ACTTGTTTAC	TCTTAAGAAT	9360
GGTTTGTTC	AAGGTATGAG	GGATAACAGA	TACTGAAAAG	TTTACTTTGG	AGACTTTAGC	9420
GACAGTCAGA	CTAATGCCGT	CAATTGTAAT	AGATCCTTTT	TCAACTATTA	AATCTAAAAT	9480
TTCTTTTTGT	GTGTTGATTT	GATACCATAC	AGCATTATCA	TCTTTTTTTA	TTGACGAGAT	9540
TTTTCTCTGA	CCATCAATGT	GTCCTGTAAC	GACGTGACCC	CCAAGTCGAC	CGTTGACAGA	9600
TAAGGCTCTT	TCTAGATTCA	CCTCACTTCC	ATGTTTTAAT	AGAGTAAGAG	CTGTTGCGACT	9660
CCATGTTTCA	TTCATTACAT	CAACTGTAAA	GGATTGATGA	TTGAAATGAG	TAAGTGTAA	9720
ACAGATACCA	TTTACTGCTA	TACTATCGCC	TAAATGGATA	TCCGTTAATA	TTTTTGAGGC	9780
TTTAATTGAT	AGTTTACAAT	TACGAGAGTC	TTTCTGTATT	CTTTCAACTT	TTCCGATTTT	9840
TTCAATTATT	CCTGTGAACA	TGGATAAATC	ACTTCACTTT	CTATGAGATA	GTCATTTTCT	9900
ATTTGAGAAA	ATGCATAAGG	TTTCAATCTA	ATAGCGTCAT	TTGGCAAAGA	AATACCTTCA	9960
CCTCCGACAG	GAAACTTGGC	ACTACCTCCA	AAAACCTTTG	GTGCAATATA	TATTTTCAGC	10020
TCATCAACAA	TTTGTTGTTC	CAAAGCACTC	CAATTCATTA	GACTGCCCCC	TTCTAGAACT	10080
AGGCTATCAA	TCTGCATGTT	TCCTAGATGT	TGCATTAAAC	TCGATAAGTC	TATATGATTG	10140
CCTTTTTTCT	TTATGGAAAG	TATTTACACAG	CCATGATTTT	GATATAGCTT	CATTTTATTT	10200
TTGTCTTCAG	AGGAAGTGGC	AATGTAAGTT	TTAATATCAT	TTGCTGTTTT	TACGATTTTA	10260
GAGGTAAGAG	GAGTTCGTAA	ATGTGTATCG	CATATGATAC	GGATAGGATT	TTTCCCTTCC	10320
TCCAATCTAC	ATGTCAGCAA	AGGATCGTCT	TGAATAACAG	TATTGACTCC	CACCATAATT	10380
GACTAACAT	GGTGTGTA	CTGATGCACA	TGCTTTCTTG	CTTCTTCTTC	AGTAATCCAT	10440
TTGGATTGAT	TTGTTTTAGT	GGCTATTTTT	CCATCCATTG	ACATTGCATA	TTTCATAAAA	10500
ACATAGGGTA	CATGCTGGGT	AATATACTTT	CTAAAACCTT	TTATTAAGTT	AAGACACTCA	10560
TTTTCTAAAA	TTCCAACAGT	AACTTGAAGA	TTATTTTCCT	CAAGTATCTT	TACTCCTTTT	10620
CCAGATACAA	TAGGATTACA	GTCTAGGCTT	CCAATGACTA	CTCTTGTAAT	ACCACTATCG	10680

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ATTATAGCAT	CTATACAGGG	AGGTGTTTTTC	CCGAAGTGAC	AACAGGGTTC	AAGTGTTACA	10740
TAAAGCGTCG	CTCCGACAGG	GGATTCTCTA	CAGTTTTTAA	GAGCATTTCT	CTCAGCATGT	10800
GGGCCACCAA	AAAACTCATG	ATAACCTTGT	CCGATAATGT	GATTATCTTT	TACAATAACT	10860
GCGCCGACCA	TAGGATTGGG	ATTGACGTAA	CCAGCCCCCT	TTTGTGCCAG	TTTTATTGCT	10920
AATTTTCATAT	ATTTTGAATC	GCTCATCTCG	CTACCTCCAA	AAAAATATAC	CTTGAATAGG	10980
GGACTACTCA	AGGCATACAA	AAGAAAACTT	ATGCGATTAA	CAAAAAATGCT	CTGAAATGAC	11040
AAGTAATCAT	TTCAGAGCAC	GCAAAAAGCA	CAAAATATACT	TTTATCTTCT	TTCATCCAGA	11100
CTATACTGTC	GGCTTTGGAA	TTTCACCAAA	TCATGCCTTT	CGGCTCGTGG	GCTATACCAC	11160
CGGTAGGGAA	TTTCACCCTG	CCCTGAAGAT	AGTTATTCAA	TTACAGATGA	TTATAGTACT	11220
TAATTTTGAA	TATGTCAACA	GATAAATACC	GATTGTTTTT	GATATACTGT	ATTTGTGATA	11280
ATCGATTCTC	GCTCCTCGGA	TAAAGAAAAT	ATGATATACT	AGATAAACGA	AATAAGAGAG	11340
AAGGAATACT	ATGTACGCAT	ATTTAAAAGG	AATCATTACC	AAAATTACTG	CCAAATACAT	11400
TGTTCTTGAA	ACCAATGGTA	TTGGTTATAT	CCTGCATGTG	GCCAATCCTT	ATGCCTATTC	11460
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CTCTGGGATT	GGTCCTGTAT	CAGCTCTTGC	TATTATCGCT	GCTGATGACA	ATGCTGGCTT	11640
GGTTCAAGCC	ATTGAAACCA	AGAACATCAC	CTACTTGACC	AAGTTCCCTA	AAATTGGCAA	11700
GAAAACAGCC	CAGCAGATGG	TGCTGGACTT	GGAAGGCAAG	GTAGTAGTTG	CAGGAGATGA	11760
CCTTCCTGCC	AAGGTCGCAG	TGCAAGCAAG	TGCTGAAAAC	CAAGAATTGG	AAGAAGCTAT	11820
GGAAGCCATG	TTGGCTCTGG	GCTACAAGGC	AACAGAGCTC	AAGAAAATCA	AGAAATTCTT	11880
TGAAGGAACG	ACAGATACAG	CTGAGAACTA	TATCAAGTCG	GCCCTTAAAA	TGTTGGTCAA	11940
ATAGGAGCAG	AGAATGACAA	AACGTTGTTC	GTGGGTCAAG	ATGACCAACC	CGCTCTACAT	12000
CGCCTATCAT	GATGAGGAGT	GGGGCCAGCC	CCTCCATGAT	GACCAAGTAT	TGTTTGAGTT	12060
GTTGTGTATG	GAAACCTATC	AGGCAGGCCT	GTCTTGGGAA	ACGGTACTCA	ACAAACGCCA	12120
AGCTTTCCGA	GAAGTCTTTC	ATAGCTATCA	AATTCACTCA	GTCGCAGAGA	TGACTGACAC	12180
TGAATTGGAA	GCCATGCTGG	AGAATCCAGC	TATCATTCGA	AATAGAGCCA	AGCTTTTTGC	12240
TACACGCGCT	AACGCCCAAG	CCTTTCTACA	GTTACAGGCA	GAGTACGGCT	CTTTTGATGC	12300
CTATCTTTGG	TCTTTTGTTG	AGGGGAAAAC	TGTCGTTAAC	GATGTTCCCTG	ATTATCGCCA	12360
AGCGCCAGCT	AAAACACCCT	TATCTGAGAA	ATTAGCCAAA	GATCTCAAAA	AACGAGGCTT	12420
CAAGTTCACA	GGCCCAGTCG	CCGTATTGTC	TTTTCTACAG	GCTGCAGGGC	TAGTTGATGA	12480

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CCACGAGAAT	GATTGTGAGT	GGAAAGGTCT	TAAATGATGT	CTAACAAAA	TAAGGAAATT	12540
CTGATTTTTG	CGATTCTCTA	TACAGTCCTC	TTTATGTTTG	ATGGCGTTAA	ATTGCTGGCT	12600
TCTTTAATGC	CATCTGCCAT	TGCAAATTAT	CTTGTTTATG	TAGTTTTAGC	TCTATATGGC	12660
TCCTTCTTGT	TCAAGGATAG	ATTGATCCAA	CAATGGAAGG	AGATTAGAAA	GACTAAAAGA	12720
AAATTCCTTCT	TTGGAGTCTT	AACAGGATGG	CTCTTTCTCA	TTCTGATGAC	TGTTGTCTTT	12780
GAATTTGTAT	CAGAGATGTT	GAAGCAGTTT	GTGGGACTAG	ATGGACAAGG	TCTAAATCAG	12840
TCTAATATTC	AAAGTACCTT	TCAAGAACAA	CCACTACTGA	TAGCTGTTTT	TGCTTGTGTC	12900
ATTGGACCTC	TGGTAGAAGA	ATTATTTTTT	CGTCAGGTCT	TATTGCATTA	CTTGCAGGAA	12960
CGGTTGTCAG	GTTTACTAAG	CATTATTCTG	GTAGGACTTG	TTTTTGCTCT	GACTCATATG	13020
CACAGTTTGG	CTCTATCAGA	GTGGATTGGT	GCAGTTGGTT	ACTTAGGTGG	AGGCCTTGCC	13080
TTTTCTATTA	TTTATGTGAA	AGAAAAAGAG	AATATCTACT	ATCCCCTACT	TGTTTCACATG	13140
TTAAGCAACA	GCCTCTCCTT	AATCATTTTA	GCTATCAGTA	TAGTAAAATG	AAATGAGAAC	13200
AGGACAAATC	GATTTCTAAC	AATGTTTTAG	AAGTAGAGGT	GTACTATTCT	AGTTTCAATA	13260
TACTGTAATA	TGTGATGAAA	ATGCCAGTAA	TGATACCGAG	AAAAAAGCTG	AGAACTTTT	13320
CCCAGCTTTA	TTTGTTATAG	TCAAAGAGAA	TGACTTGTTT	CTGTGCATCT	ACATGAGCAT	13380
GGACCCCAA	GGGTACAATT	GCTCTTGGAG	TTGCGTGGCC	GACATTCAGA	TTATAGACAA	13440
TCGGGATATT	GCTGTCAATG	ATATCCAATA	GTGCCTCTTT	ATAGTCGTCA	TGGAAAGTTT	13500
CATCCATAGG	TTTTCCGACC	AAGAGTCCAT	TGATGACCGC	GAATATGCCA	GTGTCCTTTA	13560
AAGTTAGCAA	CATCTTTTTG	AAGTCTTCTG	GCTTAGGCTT	TTCTTCGCTT	GTTTCGAGCA	13620
AGAGGATTTT	CCCTTCCCAG	TCTGACAAGT	CAGGGAAAAG	TTTGTATTTT	TGGCAGAGTT	13680
CCGTGCTATC	TGCGTATCGA	GAGTTGTCAA	AGATATCGTA	GAGGGATTCT	AGGCAACCAC	13740
CGAGGATTTT	CCCCTCGAAC	TGGGCACTTC	CTTGCAACAA	GTCAAAACCT	GTATTTGTAT	13800
GACTGACACG	AGGTGTTCCC	AGGGCCGTGG	GACTAAAATC	AGTTCGTTCC	TCATACCAA	13860
CGTCACTAGG	GCGGATTTCT	GAAATTCTTC	CCGTCTCAAT	CAATTCCTTA	AAGTAGTGAA	13920
GGCTATAGGC	TAGCATTTCT	TTGTCTAATT	CACAAATGTC	TGCTAAAAAG	GATTGACCAT	13980
AAAAAGTCTT	GATTCCTAAT	TTATGCAACA	TGAGGTGGTT	CATGGTTGTA	TCCGAGAAGC	14040
CAAGAAAAAT	TTTTTGCTTG	ATAACCTTTT	GGAGTTGGTC	ATTTTCAAAA	AGATAAGGTA	14100
GCAAGCGATA	GGTATCGTCT	CCACCGATGG	CACATAGGAT	CATGTCGATG	CTATCATCAG	14160
AAAAGGCATG	AATCAAATCC	TCTGCACGAG	CTTCAGGATG	GTCCTTGATA	AAGTCTAATC	14220

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CTTTTAACGA ATGGGGCAAA AAGATGGGAT TGGTCCCAGA TCCTTGAGAC GTT

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(2) INFORMATION FOR SEQ ID NO: 41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9828 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 41:

GTGAAGTGCG GCAAAAGGTG CAAGTGATGA GCTCAGGTTT TTTAGCTCTT GACATTGCCC	60
TTGGCTCAGG TGGTTATCCT AAGGGACGTA TCATCGAAAT CTATGGCCCA GAGTCATCTG	120
GTAAGACAAC GGTGCCCCTT CATGCAGTTG CACAAGCGCA AAAAGAAGGT GGGATTGCTG	180
CCTTTATCGA TGCGGAACAT GCCCTTGATC CAGCTTATGC TGCGGCCCCTT GGTGTCAATA	240
TTGACGAATT GCTCTTGTCT CAACCAGACT CAGGAGAGCA AGGTCTTGAG ATTGCGGGAA	300
AATTGATTGA CTCAGGTGCA GTTGATCTTG TCGTAGTCGA CTCAGTTGCT GCCCTTGTTT	360
CTCGTGCGGA AATTGATGGA GATATCGGAG ATAGCCATGT TGGTTTGCAG GCTCGTATGA	420
TGAGCCAGGC CATGCGTAAA CTTGGCGCCT CTATCAATAA AACCAAAACA ATTGCCATTT	480
TTATCAACCA ATTGCGTGAA AAAGTTGGAG TGATGTTTGG AAATCCAGAA ACAACACCGG	540
GCGGACGTGC TTTGAAATTC TATGCTTCAG TCCGCTTGGA TGTTCTGGT AATACACAAA	600
TTAAGGGAAC TGGTGACCAA AAAGAAACCA ATGTCGGTAA AGAACTAAG ATTAAGGTTG	660
TAAAAAATAA GGTAAGCTCA CCGTTTAAGG AAGCCGTAGT TGAAATTATG TACGGAGAAG	720
GAATTTCTAA GACTGGTGAG CTTTTGAAGA TTGCAAGCGA TTTGGATATT ATCAAAAAAG	780
CAGGGGCTTG GTATTCTTAC AAAGATGAAA AAATTGGGCA AGGTTCTGAG AATGCTAAGA	840
AATACTTGGC AGAGCACCCA GAAATCTTTG ATGAAATTGA TAAGCAAGTC CGTTCTAAAT	900
TTGGCTTGAT TGATGGAGAA GAAGTTTCAG AACAAGATAC TGAAAACAAA AAAGATGAGC	960
CAAAGAAAGA AGAAGCAGTG AATGAAGAAG TTCCGCTTGA CTTAGGCGAT GAACTTGAAA	1020
TCGAAATTGA AGAATAAGCT GTTAAAGCAG TGGAGAAATC CGCTACTTTT TCGATTTTTG	1080
ATTCAAGTTT TTAGATTATA TATAGTAGCT TGAAATAAGA TATGAACAAC TCTATTAGGA	1140
AAGTCAAATT AATTTCTAGA AATGTTTTAG CAGCTACAGC GTACTATTCC AAACCAACC	1200
AACTATAATA GATCGAAACT AGAATAGTAC ATATCTACTT CTAAAACATT GTTAAAAATC	1260
GATTTGACTT TCCTTATTTT ATTCCGCTAT ATATAGTTTG CTGTTTCTTG TCGCTCCTCT	1320
GGAAAGCTGA TATAATAGCT TTATGAATAA AAAACGAACA GTGGACCTGA TACATGGTCC	1380

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GATTCTTCCC	TCGCTCTTAA	GCTTCACCTT	TCCAATTTTG	CTATCAAATA	TTTTTCAACA	1440
GCTCTATAAC	ACTGCTGATG	TCTTGATTGT	TGGACGATTT	CTTGGTCAAG	AATCCTTGGC	1500
TGCAGTAGGA	GCGACGACAG	CGATTTTTGA	CCTGATTGTA	GGTTTTACAC	TTGGTGTGG	1560
CAATGGCATG	GGGATTGTCA	TTGCTCGTTA	TTATGGGGCT	CGGAATTTCA	CTAAAATCAA	1620
GGAAGCAGTA	GCAGCCACCT	GGATTTTAGG	TGCTCTTTTG	AGCATTCTAG	TTATGTTGCT	1680
GGGCTTTCTT	GGCTTGTATC	CTCTCTTGCA	ATACTTAGAT	ACTCCTGCAG	AAATTCTTCC	1740
TCAATCTTAT	CAATATATTT	CTATGATTGT	GACCTGTGTA	GGTGTGAGCT	TTGCTTATAA	1800
TCTTTTTGCA	GGCTTGTGTC	GGTCTATTGG	TGACAGTCTA	GCAGCCCTGG	GATTTCTGAT	1860
TTTCTCTGCC	TTGGTTAATG	TGGTCTGGA	TCTCTATTTT	ATTACGCAAT	TGCATCTGGG	1920
AGTTCAATCC	GCAGGACTTG	CTACCATTAT	TTGCAAGGT	TTATCAGCGG	TTCTCTGCTT	1980
TTATTATATT	CGTAAAAGTG	TGCCAGAACT	CTTGCCACAG	TTTAAACATT	TCAAATGGGA	2040
CAAAGCTTG	TACGCGGATC	TCTTGAGCA	AGGTTTGGCT	ATGGGCTTGA	TGAGTTCAAT	2100
TGTATCTATC	GGCAGTGTGA	TTTTACAGTT	TTCTGTAAAT	ACATTTGGTG	CAGTGATTAT	2160
TAGTGCCAG	ACGGCAGCTC	GACGCATTAT	GACCTTTGCC	CTTCTTCCTA	TGACCGCTAT	2220
TTCTGCATCA	ATGACGACCT	TTGCTTCTCA	GAATCTAGGA	GCTAAGCGAC	CTGACCGTAT	2280
TGTTCAAGGT	CTTCGAATCG	GCAGTCGTTT	AAGTATATCC	TGGGCAGTTT	TTGTTTGTAT	2340
TTTCCTCTTT	TTTGCCAGTC	CAGCTTTGGT	TTCTTCTTG	GCTAGTTCGA	CAGATGGTTA	2400
CTTGATAGAA	AATGGAAGTC	TCTATCTGCA	AATCAGTTCA	ACCTTTTATC	CCATTTTGAG	2460
CCTCTTGTTG	ATTTATCGCA	ATTGCTTGCA	GGGCTTGGGG	CAAAGATCC	TTCTCTAGT	2520
TTCTAGCTTT	ATTGAACTAA	TCGGAAAAAT	CGTTTTTGTTG	GTTTTGATTA	TTCTTGGGC	2580
AGGATATAAG	GGTGTATCC	TTTGTGAACC	TCTTATCTGG	GTTGCCATGA	CAGTTCAACT	2640
GTACTTCTCA	TTATTCCGTC	ATCCCTTGAT	AAAAGAAGGC	AAGGCAATCT	TGGCAACCAA	2700
AGTGCAATCC	TAGTTGGATT	TACTGAATAA	AATCCATTTT	CTCTAGTGAA	AATCGAAAAA	2760
ACTTGTGTTT	TCTTCTTTAG	TTTGGTGTG	AAAATAGTTT	AACAGACTTT	TGACTTCTTT	2820
TATATGATAT	AATAAAGTAT	AGTATTTATG	AAAAGGACAT	ATAGAGACTG	TAAAAATATA	2880
CTTTTGAAAA	TCTTTTGTAGT	CTGGGGTGTT	ATTGTAGATA	GAATGCAGAC	CTTGTCAGTC	2940
CTATTTACAG	TGTCAAATAA	GTGCGTTTTG	AAGTTCTATC	TACAAGCCTA	ATCGTGACTA	3000
AGATTGTCTT	CTTTGTAAGG	TAGAAATAAA	GGAGTTTCTG	GTTCTGGATT	GTAAAAAATG	3060
AGTTGTTTTA	ATTGATAAGG	AGTAGAATAT	GGAAATTAAT	GTGAGTAAAT	TAAGAACAGA	3120

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TTTGCCTCAA	GTCGGCGTGC	AACCATATAG	GCAAGTACAC	GCACACTCAA	CTGGGAATCC	3180
GCATTCAACC	GTACAGAATG	AAGCGGATTA	TCACTGGCGG	AAAGACCCAG	AATTAGGTTT	3240
TTTCTCGCAC	ATTGTTGGGA	ACGGTTGCAT	CATGCAGGTA	GGACCTGTTG	ATAATGGTGC	3300
CTGGGACGTT	GGGGGCGGTT	GGAATGCTGA	GACCTATGCA	GCGGTTGAAC	TGATTGAAAG	3360
CCATTCAACC	AAAGAAGAGT	TCATGACGGA	CTACCGCCTT	TATATCGAAC	TCTTACGCAA	3420
TCTAGCAGAT	GAAGCAGGTT	TGCCGAAAAC	GCTTGATACA	GGGAGTTTAG	CTGGAATTAA	3480
AACGCACGAG	TATTGCACGA	ATAACCAACC	AAACAACCAC	TCAGACCACG	TTGACCCTTA	3540
TCCATATCTT	GCTAAATGGG	GCATTAGCCG	TGAGCAGTTT	AAGCATGATA	TTGAGAACGG	3600
CTTGACGATT	GAAACAGGCT	GGCAGAAGAA	TGACACTGGC	TACTGGTACG	TACATTCAGA	3660
CGGCTCTTAT	CCAAAAGACA	AGTTTGAGAA	AATCAATGGC	ACTTGGTACT	ACTTTGACAG	3720
TTCAGGCTAT	ATGCTTGCAG	ACCGCTGGAG	GAAGCACACA	GACGGCAACT	GGTACTGGTT	3780
CGACAACTCA	GGCGAAATGG	CTACAGGCTG	GAAGAAAATC	GCTGATAAGT	GGTACTATTT	3840
CAACGAAGAA	GGTGCCATGA	AGACAGGCTG	GGTCAAGTAC	AAGGACACTT	GGTACTACTT	3900
AGACGCTAAA	GAAGGCGCCA	TGGTATCAAA	TGCCTTTATC	CAGTCAGCGG	ACGGAACAGG	3960
CTGGTACTAC	CTCAAACCAG	ACGGAACACT	GGCAGACAAG	CCAGAATTCA	CAGTAGAGCC	4020
AGATGGCTTG	ATTACAGTAA	AATAATAATG	GAATGTCTTT	CAAATCAGAA	CAGCGCATAT	4080
TATTAGGTCT	TGAAAAAGCT	TAATAGTATG	CGTTTTCTTG	TGGAGATATT	TCCTTCAATT	4140
TTGCTACTAT	ATTAAACAAA	AATCAAAAAG	CAAACTAGAA	AGTTATGCTC	AAATAAAATC	4200
TAAATTTGAC	AATGTAAACC	GAGTCGGATA	GCTTTAAGTA	CTGTTTTGAG	GTTGAAGATA	4260
CGATTTTTGA	TAGGAACTCA	TCAATTTTAG	ATTTTAAAGC	AGCATCAATA	AATTGCTTCC	4320
TTGTTTTGTC	ATAATTTTTT	TATTTAAAAA	ATTATGACma	GAGTGTGCTA	TTCTTTTTAT	4380
GAGAGGTGTA	TGAATATGAT	AAATGTATGT	GATAAATGTA	TGTGATGTTG	GAAAAAGAAT	4440
AAAAGAACTT	AGAATATCTT	CAAATCTTAC	TCAAGATAAG	ATTGCTGAGT	ATTTGTCTTT	4500
GAATCAAAGC	ATGATTGCCA	AAATGGAAAA	AGGTGAAAGG	AATATCACGA	ATGGATTTAA	4560
GTAATAAAGC	TTCAAATCTT	AGAAAAAAGT	TGGGAGCTGA	TGGTGAATCG	CCGATAGATA	4620
TTTTTAAATT	GGTACAAAAG	ATAGAAAATT	TGACGCTGGT	ATTTTATGGA	CTCGGAAAGA	4680
ATATTAGCGG	AGTCTGTTAT	AAAGGAACTC	AGTTCAGTCT	CATTGCAGTC	AATTCAGACA	4740
TGCCATTAGG	AAGGTAAAGA	TTTTCTTTAG	CACATGGACT	GTATCATCTT	TATTATGATG	4800
AGGTGAAGAA	GAGTTCAGTC	AGTCTTATCT	TGATTGGTGA	AGGAGATGAA	ACTGAAAGAA	4860
AAGCGGATCA	GTTTGCTTCT	TATTTTTTAA	TTTTCCCATC	TTCACTGTAT	AGGATGGTTG	4920

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AGGAAATCAG	AGAAAATGCC	AATAGAACTC	ATCTTGAAGT	AGAAGATATT	ATAAAATTGG	4980
GTCAGTTTTA	TGGTATCAGT	CATAAAGCTA	TGTTATATAG	ATTGAGGAAT	GATGGATACC	5040
TTGATGCAGA	AGAAATTAAA	AATATGGATA	TTAGTGTTAT	AGAGACAGCT	TCAAGATTAG	5100
GCTATGATAC	AAGTTTATAT	CGTCCTTTGT	CAGAAAGTAA	AAAAGAAATG	GCATTAGGAT	5160
AATATATTAA	TTCAACTGAA	CAACTTTTAG	AAAATAACAG	AATTTGCGAA	GGGAAGTATG	5220
AGGAACTGTT	ACTAGATGCT	TTCAGATATG	ATATTGTATA	TGGGCTAGAT	GAAGAGGGGG	5280
GAGTTGTCGT	TTGACTAGTC	GTGTATTTAT	TGATGCAGAT	TGTATTTTCAG	TATTTTTTATG	5340
GGTTGGCACT	GAACATCTTT	TAGAAAAGCT	CTATTTGGGT	AAAATTGTTA	TTCCACAAGA	5400
GGTGTATGAT	GAAATCAATA	TACCTACAAT	TCCCCATTTA	AAATCTAGGA	TAGATCAGTT	5460
GGTAGCTAAG	GGTTCAGCTG	AGATTGTGAG	CATAGACATT	GGAAGTGAAG	AATACGCATT	5520
ATATAGAGAT	TTAACAAGAA	ATCATGATAG	TAACAAGATT	ATTGGTAAGG	GAGAAGGGGC	5580
ATCTATTTCC	TTAGCGAAAA	AGCATAATGG	GATATTAGGA	AGTAATAACC	TAAGAGATGT	5640
TAAATCATAT	GTAGAAGAAT	TTTCTTTAGA	ATATATGACA	ACAGGAGATA	TACTGATTGA	5700
AGCGTTTAAA	GCGTAATTTA	TTACTGAATA	AGAGGGCAAT	CATATCTGGA	ATAATATGCT	5760
TAAAAAGAGA	AGGAAAATTG	GTGCAAATTC	ATTTTCAGAC	TATCTTCGTG	GAAGTATTCA	5820
TCAAAATAGA	CAAAAATAAA	TTTGGATAAA	TCGAACTCAC	TATTCAGGAG	GCATATGAGC	5880
AATTCGAAAA	AGAAAAGTGT	CAAATTGAGC	CTATAGGAGT	AGAAGTGAAA	TAGTAAGTCC	5940
TGCATAGTGG	ATGAGAGAAA	AGTTCTCCTT	GAAGTTTTC	TGAACTATCA	GTCGCATGTC	6000
AAACGATATG	TAGGGTAATG	TGAGAGGGGA	TAGCGAGTAG	TTTTTTGGTTA	TTTTATCAAA	6060
AACTTATAT	TTTATTATAC	CGAATGATAA	AATATAATAA	AAATGATAGA	ATAAGGAAAA	6120
AACATGAATG	TCAAAAAGAT	AATGTCAATT	TTTCAATCCT	TTTATGTTGA	TGTCAGTATT	6180
GAGGAACTGA	CTTTGACTTT	ACCAATCAGT	TTTGTAAGAA	GGTTTGAGTA	TACTCAAATG	6240
ACTTTTCATA	AGGAATCATT	TTTATTGATT	AAAGAAAAGA	GAAGGGGGAG	TTTGAGTTCA	6300
TTTGTTACTC	AGGCTCGCAC	TATGGGTGAA	AAAGCCAATA	TGGATGTTGT	TTTGGTGTTT	6360
TCGAAGTTAT	CAGACAGTGA	AAAAAAGCAA	TTACTTCAAG	CTAGAGTTCC	GTTTGTAGAC	6420
TTTAAGGGAA	ACCTCTTCTT	CCCTCCATTG	GGACTAGTAC	TCAATGCGAA	TGATACTGAA	6480
GTCCCTAAGG	AATTAACACC	TAGCGAACAA	TTAACGTGGA	TTGCCTTTTTT	ATTGACAAAA	6540
GGTCAAAAAG	TAGTAGATGT	TGATTTGCTT	TCACAAGTCA	CTGGACTTCC	AAACTCAACA	6600
ATTTATAGGT	GTTTGAGGAC	TTTTAAAGCT	TTATATTGGT	TAAACAAGCA	AAATAAGCTT	6660

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TACACATATA	CGGTGTCAAA	GAAAGAATTA	TTCTTAAAAT	CCGTGTCATG	TTTATTTAAT	6720
CCCATCAAAA	AACGGATTTT	ATTGCCAGAT	GGCGATATAA	AGCAGATAAA	ATCTGTTTCT	6780
AACCTTCTAT	ATGGTGGTGC	TTATGCTTTG	TCGCATTCAA	CTTTTTTTAGC	TGAAACGGAT	6840
GAAAATATTA	GCTATGTCAT	ATGGCAGAGA	AAATTCAATC	AGTTATCCTT	GCCACTTTCT	6900
CAGCATGTTT	TAAAATGAAA	GATGCTAGAG	ATATGGAAAT	ATCGTCCTTT	TGTATCTGAG	6960
TTTTGGAATG	ATTTTAAAAA	TAATCATGAT	AAACAATTTG	TAGATCCGAT	TTCTCTTTAT	7020
TTGACCTTAA	AAGATGATGA	TGACCCACGT	ATAGAGGAAG	AGAGTGAAGC	ACTAGAAAAT	7080
ATGATATTAC	AGTATCTGGG	AGAAGATGAT	GCCAGCTAAT	ACGAAAGTTA	TTTTTCAAGA	7140
AATGTTTGCG	GATTTTCAGA	ACTATTATGT	TCTGATTGGG	GGAAC TGCTA	CCTCTATCGT	7200
ATTGGATTTCG	CAAGGATTTA	AAAGTCGCAC	AACAAAAGAT	TATGATATGG	TCATCATTGA	7260
TGAAGTAAAA	AATAAGGAAT	TTTATACTAC	CTTGAATCAT	TTTTTTAGAAT	TGGGAGAGTA	7320
TCAAGGAAGT	CAGAAAGATG	AGAAAGCGCA	GCTTTTTCGA	TTTACAACAA	CTAATCCTGA	7380
GTTTCCTTCT	ATGATTGAAC	TATTTAGTAT	CTTACCAGAA	TATCCATTAA	AGAAGGACGG	7440
TCGAGAAATT	CCCTTACATT	TTGACCAAGA	TGCTAGTTTA	TCAGCCTTAT	TATTGGATGA	7500
AGATTATTAT	AATATATTGG	TGCATGAAAA	AGAAACCATT	CAGGGGTATT	CGGTATTGAG	7560
TAATTGTGGT	TTATACTCTT	CGAAAATCTC	TTCAAACCAC	GTCAGCTTCC	ATCTACAACC	7620
TCAAAACAGT	GTTTTGAGCA	GCCTGCAGCT	AGCTTCCTAG	TTTGCTCTTT	GATTTTCATT	7680
GAGTATTAAT	TATTTTAAAG	GCTAAAGCTT	GGCTGGATAT	GAGGGAGCGC	TCTGCCACAG	7740
GTGCTCAAGG	TTTAAGTAAG	TCCATTAAAA	AGCATTTGAA	TGACCTTACC	CGTTTGACAG	7800
CTTCCTTGCT	AGGAGATGAA	AAGTTATCGG	CTATAACATC	AAGTAGTGCG	GTAAAAGCAG	7860
ACATGCACCG	CTTTGTGATA	GAATTAGAGC	CTGTGAAGTC	AACTATTCTT	CAAAATAATG	7920
ACATTTTCATT	GGATCAAAAT	GAAATTTTGT	AAATTCTGAA	AAATTTTCTC	GATGGTTAAA	7980
ATAATTGTAG	CGAGATGGCT	ATATTGAATT	CGTCTATATC	TGGAAACTAG	AAAAAACTTC	8040
AATTTTCAGGA	GAAAATGAAG	TCAATCTTCC	CACAATCAAA	CGTATAGTAT	CAAGGTTTTT	8100
CAAGACCTGA	TATTATGCGT	TTTTTGCTTT	TCAAAACTTT	TTGCCCAGTC	TTCGTTTTTA	8160
TCCTCTAGTC	ACTTGATTG	TTTCAGGTGG	TTTTTTAGTA	TAGTAGAATG	AAACGAGAAC	8220
AGGACAAATT	GATCAGGACA	GTCAAATCGA	TTTCTAACAA	TGTTTTAGAA	GCAGAAAGTG	8280
ACTATTCTAG	TTTCAATCTA	CTATAGTTAA	ATCTGCGGTC	AAGTCTACTG	GTGAATCTAT	8340
GATTGTAATA	CTCTTCCAAA	ATCTCATCAA	CCACGTCAGT	CTTGCCCTGC	AGTCTGTATC	8400
TTACTGACCA	AGCTAGTGAT	GGATTTAGAA	TAGGTGATTT	GGAGCGTCCT	ATTAGCTAGG	8460

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AAATGCTGCT CATAGTCCTT TGCTGAGGCT AGGGTGTTTC AACATTCAAC ACTCAACTGG	8520
TTGATCTAGT TGATAGGAAG GGAGTTACTA TAAAATACTC AGGCTTCCAT CATATTTTTT	8580
GAAACGATTG TGTAATCAAA ATGTACCAAT ATTGTAGTAT TGGTACAGAA GATGTTGTGA	8640
ATGGATAAAT ATATCATAAC TGCTATCTCA AAAAGATTTC ATATGTCTGT GCATATATAA	8700
TAGACTTCCT GCAAAACTAG AATCCTAGTT CATGATTGAT AATACCAGCA ATCAAATTCA	8760
TTCGTAATCC AAAGCGTTTA CGATGATTTT GATAGGTTGT TGAAAACATT TTAAACGTTT	8820
CTACTTTGGC AAAGATGTTT TCAACCTTGC TTCTCTCCTT AGATAGCGCA TGGTTATAGG	8880
CTTTATCTTC AGCTGTTAGC GGCTTGAGTT TGCTGGATTT ACGTGGAGTT TGTGCTTGAG	8940
GACATATCTT CATGAGCCCT TGATAACCAC TGTGAGCCAA GATTTTACCA GCTTGTCCGA	9000
TATTTCTGCA ACTCATTTTG AACAACTTCA TATCATGACA ATAGTTCACA GTGATATCCA	9060
AAGAAACAAT TCTCCCTTGA CTTGTGACAA TCGCTTGAGC CTTCATAGCG TGAAATTTCT	9120
TTTTACCAGA ATCATTCGCT AATTCTTTTT TTAGGGCGAT TGATTTTTAC TTCCGTCGCA	9180
TCAATCATTA CCGTGTCTC AGAACTAAGA GGAGTTCTTG AAATCGTAAC ACCACTTTGA	9240
ACAAGAGTTA CTTCAACCCA TTGGCTCCGA CGGATTAAGT TGCTTTCGTG AATACCAAAA	9300
TCAGCCGCAA TTTCTTCATA AGTGCGGTAT TCTAGGCTTA ATTTAGGTTT TCGTCCACCT	9360
TTTGCGTGT TAAGTTGATA AGCTGTTTTT AATACAGCTA ACATCTCTTT AAAAGTCGTG	9420
CGCTGAACAC CAACAAGACG CTTAAATCGT GTATCAGTTA ATTGTTTACT TGCTTCATAA	9480
TTTCGCAGGG AGTCTATTGA CTCTTTGGTA GGTGTCAATG TTTTTTTCAT CTATCCCGAG	9540
AATTATTTTC CCGCCATTG TATTTGCAAA TGCTGAGTAG GTTTCCGAGA AAGACTCTGG	9600
AAGATTGTTT TTAGCTTTTT TGTATTCTAA ATCAACCCCT TCAAATTTTA AGTCCATATT	9660
TTTCCTTTAC ATCTGTTTTT TGTGGTTCTG GTATTTGTTC AAGTTGAGTG ATAATATAGC	9720
GAATTGAATT TCGAGAGTTT TTAATCAGTT AATTTCTTTT TTAACCCACT TTAATTGCTT	9780
TTTTAACACG GGTTAAAAA GAAATTAAAG TGGGTTAATT TTTCTTGA	9828

(2) INFORMATION FOR SEQ ID NO: 42:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 3369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 42:

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CCGCGAAAGA	TATTTTGTAA	CAAGAGTTTG	GACGTGAGGT	CCGTGGCTAT	AATAAAGTAG	60
AAGTTGACGA	GTTTTTAGAC	GATGTCATCA	AGGACTATGA	AACCTATGCT	GCCTTGGTCA	120
AGTCACTTCG	TCAGGAAATT	GCGGATTTGA	AGGAAGAATT	AACTCGTAAA	CCGAAACCTT	180
CACCAGTTCA	AGCAGAACCC	CTTGAAGCGG	CAATTACAAG	TTCTATGACG	AATTTTGATA	240
TTTTGAAACG	CCTGAATAGA	TTGGAAAAAG	AAGTTTTTTG	TAAACAAATT	TTAGATAACT	300
CAGATTTTTA	AGTAGTTATT	TGAGATGTGC	AATTTTTTGA	TAATCGCGTG	AGGAGAATTG	360
TTTCTCATGA	GGAAAGTCCA	TGCTAGCACA	GGCTGTGATG	CCTGTAGTGT	TTGTGCTAGG	420
CGAAACCATA	AGCCTAGGGA	CGAGAAATCG	TTACGGCAGT	TGAAATGGCT	AAGTCCTTGG	480
ATAGGCCAGA	GTAGGCTTGA	AAGTGCCACA	GTGACGGAGT	CTTCTTGGA	ACAGAGAGAG	540
TGGAACGCGG	TAAACCCCTC	AAGCTAGCAA	CCCAAATTTT	GGTCGGGGCA	TGGAGTACGC	600
GGAAACGAAC	GTAGTATTCT	GACTGCTATC	AGCTAGAGCT	GTTAGTGGTA	GACAGATGAT	660
TATCGAAGGA	AGTGGTCCTA	GTCACTTCTG	GAACAAAACA	TGGCTTATAG	AAAAATGCAT	720
ATAGGTTGGG	GCTGAGAAAT	TTTCTCAACC	TCATTTTTTA	AAGTGGACAT	ATAGAAAGGT	780
CTTGCAAGAC	TGTAACATGA	AAAAAGAATT	TAATTTAATT	GCAACTGTGG	CAGCAGGGCT	840
TGAGGCTGTC	GTTGGTCGTG	AAGTGCGAGA	GTTGGGCTAC	GATTGTCAGG	TTGAAAATGG	900
ACGTGTTTCGT	TTTCAAGGAG	ACGTGAGAGC	TATTATCGAA	ACCAACCTTT	GGCTTCGGGC	960
AGCAGATCGT	ATCAAAATTA	TCGTAGGAAC	GTTCCCAGCT	AAGACTTTTG	AAGAGCTATT	1020
TCAGGGAGTT	TTGCTTTTGG	ATTGGGAAAA	TTATTTACCA	CTTGGAGCTC	GGTTCCCGAT	1080
TTCAAAAGCT	AAATGTGTTA	AGTCCAAACT	TCACAATGAG	CCCAGTGTTT	AGGCTATTTT	1140
TAAGAAAGCT	GTTGTCAAGA	AATTGCAGAA	ACACTATGCT	CGCCCAGAAG	GGGTTCCTCT	1200
GATGGAGAAT	GGCCCAGAGT	TTAAGATTGA	GGTCTCTATT	CTCAAAGATG	TGGCAACTGT	1260
CATGATTGAT	ACGACCGGGT	CTAGCCTCTT	TAAACGTGGT	TATCGTACCG	AAAAAGGTGG	1320
CGCTCCTATC	AAGGAAAATA	TGGCAGCAGC	CATTTTACAA	CTTTCTAACT	GGTATCCAGA	1380
CAAGCCTTTG	ATTGATCCGA	CCTGTGGTTC	GGGGACTTTC	TGTATTGAGG	CAGTTATGAT	1440
TGCTAGAAAG	ATGGCGCCAG	GTCTTCGTCT	CTCTTTTGCA	TTTGAGGAAT	GGAAGTGGAT	1500
CAGCGATCGC	TTGATTCAAG	AAGTGCGCAC	AGAAGCGGCT	AAAAAAGTAG	ACCGTGAGCT	1560
TGAGCTGGAT	ATCATGGGCT	GTGATATTGA	TGCTCGCATG	GTGGAAATTG	CTAAGGCCAA	1620
TGCTCAGGTA	GCTGGTGTTG	CAGGAGACAT	TACTTTTAAG	CAGATGCGCG	TGCAGGATTT	1680
ACGTTCCGAT	AAAATCAATG	GAGTAATCAT	TTCCAATCCG	CCTTATGGTG	AACGTTTGTC	1740
AGATGATGCA	GGGGTGACCA	AGCTCTATGC	TGAGATGGGG	CAAGTATTTG	CACCGCTGAA	1800

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AACTTGGAGC	AAATTTATCC	TGACTAGTGA	TGAAGCTTTT	GAAAGCAAGT	ATGGTAGCCA	1860
AGCAGATAAG	AAGCGTAAGT	TATACAACGG	AACCTTGAAA	GTGGATCTAT	ATCAATATTT	1920
TGGTCAGCGT	GTCAAACGGC	AAGAGGTAAA	ATAGAAAGGG	ATACTCATGA	GTAAAAAAG	1980
ACGAAATCGT	CATAAAAAAG	AAGGTCAAGA	ACCGCAATTT	GATTTTGATG	AAGCAAAAGA	2040
GCTAACAGTT	GGTCAAGCTA	TTCGTAAAAA	TGAAGAAGTG	GAATCAGGAG	TCTTGCCTGA	2100
GGATTCCATT	TTGGACAAGT	ATGTTAAGCA	ACACAGAGAT	GAAATTGAGG	CGGATAAGTT	2160
TGCGACTCGT	CAATACAAAA	AAGAGGAGTT	CGTTGAAACT	CAGAGTCTGG	ATGATTTAAT	2220
TCAAGAGATG	CGTGAGGCTG	TAGAGAAGTC	AGAAGCTTCT	TCGGAGGAAG	TTCCATCTTC	2280
TGAAGACATC	TTACTACCCT	TGCCTCTGGA	CGATGAGGAG	CAAGGCTTGG	ATCCTCTATT	2340
GCTAGATGAT	GAAAATCCAA	CAGAAATGAC	TGAAGAAGTG	GAAGAGGAGC	AAAACCTTTC	2400
TCGTCTGGAT	CAAGAGGACT	CAGAAAAGAA	AAGTAAAAAA	GGCTTTATTT	TGACCGTTTT	2460
GGCGCTTGTA	TCAGTAATTA	TTTGTGTCAG	TGCTTATTAT	GTCTACCGTC	AAGTGGCTCG	2520
TTCTGACTAAG	GAAATTGAAA	CTTCTCAATC	AACTACAGCC	AATCAATCGG	ATGTGGATGA	2580
TTTTAATACA	CTTTATGACG	CCTTTTACAC	AGATAGCAAT	AAAACGGCTT	TGAAAAATAG	2640
CCAGTTTGAT	AAACTGAGTC	AACTCAAGAC	TTTACTTGAT	AAGCTGGAAG	GTAGTCGTGA	2700
ACATACGCTT	GCCAAATCTA	AATATGATAG	TCTAGCAACG	CAAATCAAGG	CTATTCAAGA	2760
TGTCAATGCT	CAATTTGAGA	AACCAGCTAT	TGTGGATGGT	GTGTTGGATA	CCAATGCCAA	2820
AGCCAAATCG	GATGCTAAAT	TTACGGATAT	TAAAACCTGGA	AATACGGAGC	TTGATAAAGT	2880
GCTAGATAAG	GCTATCAGTC	TTGGTAAGAG	CCAGCAAACA	AGTACTTCTA	GCTCAAGTTC	2940
AAGTCAAAC	AGCAGCTCAA	GTTCAAGTCA	AGCAAGTTCA	AATACGACTA	GTGAGCCAAA	3000
ACCAAGTAGT	TCAAATGAGA	CTAGAAGTAG	TCGCAGTGAA	GTCAATATGG	GTCTCTCGAG	3060
TGCAGGGGTT	GCTGTTCAAA	GAAGTGCCAG	TCGTGTTGCC	TATAATCAGT	CTGCTATTGA	3120
TGATAGTAAT	AACTCTGCCT	GGGATTTTGC	GGATGGTGTC	TTGGAACAAA	TTCTAGCGAC	3180
TTACAGTTCA	CGTGGCTATA	TCACTGGAGA	CCAATATATC	CTTGAACGTG	TCAATATCGT	3240
TAACGGCAAT	GGTTATTACA	ACCTCTACAA	GCCAGATGGA	ACCTATCTCT	TTACCCTTAA	3300
CTGTAAGACA	GGCTACTTTG	TCGGAAATGG	CGCTGGTCAT	GCGGATGACT	TAGATTACTA	3360
AGCAGTCGG						3369

(2) INFORMATION FOR SEQ ID NO: 43:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 9713 base pairs

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(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 43:

AAGTTTACAA	TTTAAATGAA	TTAACAATTT	TCCCAACTAA	AAGCACTCCA	GTTACCGCAA	60
CGTTTGTACT	GAATGTACTA	AATCGCATTC	CATCAACTTC	ATCTGTTTCG	TCAACTTGAA	120
CAGATACTAA	TTGAAGATTT	AATACTTCTG	CTGCCATAGC	TAGCTCCTCC	TATTTAAATT	180
TTTGGGATTA	AGTACTTTAT	CCACCCTCAT	ATACTCTCTC	CACCAGTAAA	ATGCAAGCAA	240
TGATACAAAA	TAGATTTAAC	TATTTTATAT	AGCGAAAAC	TACAAATTTT	TAAGAAATAA	300
TTTTTGCATT	CTTAAAGATA	AAATAGGAAC	TTTGTAGTAAT	AAATATTAAA	ATAAATAAAA	360
TAATAGATAC	TATAAAATTT	GGAAGTATTA	ACCCCAAAAG	ATTCATATCA	TCTATTAAAA	420
TATCCTCTAA	AGAGTAGTAT	ATTAAAGCCA	TAATTTTAAT	GTAAAGTAAA	AATGCAATTA	480
ATGAAGTAAC	AAATGTCAAA	AATATAGCCT	CACCAACTTT	AATCTTAACC	ATCTGGTAAT	540
TAGAAGTTCC	TAAAATTTCA	AATTGCTGAA	TCTCAATCCT	TTCTTGATGC	GATGACAAAA	600
ATGCAATTGA	AATAATATTT	GCAAGTACTA	TCAAATTTGG	TGCTCCTACA	TAGACAATAA	660
ATGCTACTTT	TAGCTCTAAA	TCACTGTCAT	CTTGAAATTG	AGATAGTATA	TTCTGAGAAA	720
TCATTTGAAA	ACTAGAAATT	AGTAATATAG	CTCCTGTAAT	TGCAGCACTG	ATAGATTTTA	780
TATAAGACTT	ACAATATAGT	AAATTCCACT	TCGAAACAAT	GAACATAAAA	TTATTTCTAA	840
ATATAATTAT	AGAAAGTAGT	TTGATAAAAC	ATGACTGTAT	AAAAGGAGAT	AATTGATAAA	900
TAATCACAAT	ATCTAAGATT	ACAATATTGA	ATATTATCTG	GGCCTTCGCT	AAAATTGTGC	960
TATCTTGGA	AATTTGTTGC	AAAGAAAGCA	ACCAGATAAC	ACTAAAACCA	GCCAATAGCA	1020
GTATTCCTTT	TACTATTGAA	AGAACATGCC	TTATTTTAGA	ACTCTTCCTA	TTTCTAATCT	1080
TCTTGAACGT	ATAAAAGCAA	CCACTTAGAA	AGGCTAAAAA	TGAAATCAAC	ACTACTGTAA	1140
TGATACATCC	AACAGCACTC	GTTTGAAATT	GGATATCAGG	TAATATATTT	TCCCCGAAAA	1200
AGTATTGTAA	AAAATAATAA	TAATTTGACG	TAACAAATAT	AGAGCATAGA	TATGCAATAA	1260
AACTAATAAT	CGAGGAAATG	ATAAAAATCT	GTCCCCCCAC	AAGAAATGAT	AGTTGAAGGC	1320
GACTTGCTCC	CAACACCTCC	AGAAGTTCGT	AATCATCTCT	AAAAATTTCA	ACCAACATAT	1380
TTATTATGTT	AGAGAGCACA	AAGAATAATG	TTACTCCTCC	GAATACTATC	GGAAACATAA	1440
AAATTGGTTT	AGGATCTGGA	AGTCCGACAA	ATACTTGCGA	ATTATTCTCA	ACATTAATTA	1500
CCCCATTAAC	AGCCAATCCC	ATAACTAAAC	TCGAAACAAA	AATTACTGGT	GAAACGCCTA	1560

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ACCATTGTTT	CTTATTATGT	AAAAATTGAT	AGTAAACTAA	TCTGAGCATC	TCTATTCCTC	1620
CGTAGTTGAT	TGTACCTCTA	AGATTTTATA	CAACTCTTCC	CCGCTAGGTC	TATGAAGTTC	1680
TTTGAAAATT	TTTCCATCTT	TCAATATTAA	TGCACGATCA	GTTTTCGAGG	CCAATTCTAT	1740
ATCGTGCGTT	ACCATAATTA	CACACTTACC	CGCCCCTACT	AACTCTCTCA	ATAATTCAAA	1800
AATTACTTCA	CGAGAAACGC	TGTCTAAAGC	CCCAGTTGGC	TCATCAGCAA	ATATTATATC	1860
ACTATCAGCA	ATAACCGCTC	TAGCTATAGC	AACCTTCTGT	TGTTCTCCAC	CAGACAGAGT	1920
TCCAACAAAA	TCGTTTAAGC	CAGCATTAAA	CTTCATTCTT	TTGAGTAAGT	TTTCTACATT	1980
TTTAATAGTT	AATTTTTTTT	GTGATAATCG	CAAAGGAAGT	GCTATATTTT	CTATTACCGG	2040
CAGGGAAGGT	ATTAAATTGT	ATGCTTGAAA	TATAAAAGAT	ACTTCGTTAC	GTCTTATACT	2100
TGACAATTTT	GCATTTCTGA	TTTTATAGGG	GTTGATTCCA	TTTAAAATTA	CTTCCCCACT	2160
TGTTGGTTCA	AGCAAAC TAG	AAATACATTT	TAATAAAGTT	GACTTTC CAG	AACCACTAAT	2220
TCCTAGAATA	CTTATAAATT	CTCCTCTCGA	AGCAGAAAGA	GAAACATTTT	TCAGCACTTG	2280
CAACGTTTTA	TTATTTCTTA	GTAAAAATTG	ATGATACAGC	CCTTTCACCT	TTAATATATA	2340
ATCTTTATCC	ATATTCTTGC	CTCCAATCAC	TTAATTTTGA	AAAGTGTTCC	ATTTTCCAAT	2400
TTATATATAT	CAGTGTATCT	CTTGTCATTT	AAGTCATAAT	GATGTGAAAC	TTCAATAAAT	2460
GAAATACCTA	AATTGAACAG	AATATCATGT	ATGGAATTTG	AATTATCATT	ATCTAAATTA	2520
GCTGATATTT	CGTCAAATAA	GTACACTTTA	TTATTTCTAA	TCAGAGCTCT	AGCTAAAGCT	2580
ATTTTTTGTT	TTTGACCTCC	AGACAAATTA	CTACCATTTT	CACCACATTG	ATAATTTAGT	2640
ATATCTATCT	TTTCTAATTC	TTCATATAGA	TTTACCTTTT	TTAACACCTC	AATTATCTGA	2700
TCATCTGAAA	AATATTCATT	TTGAAATAAA	GTTACGTTCT	CACGAATAGT	AGTGTCAAAA	2760
ATATATGGTG	TCTGATCAAC	TGTTGGTATT	GAATCTGAAC	TCTTTTTCCT	ATGTGATAAC	2820
AAATTTACAT	AACCTTTTTG	TGGCTTTAAA	GAACCATTA	TTAAATTTAA	AATCGTTGTT	2880
TTCCCACTAC	CAGAAGTTCC	TGTAAATAAT	ACCCTAAATG	GTGACTTAAA	TGAGAAGTCA	2940
ATACTTAATT	TATTTTCTGG	TGTAATAGAA	TATACAACAT	CTTTCATGTG	TATCTCATCT	3000
ATTGATGAAG	TATACAGTCC	GTTATTATCA	TGTTTCAGCGT	CTATAAAATT	CTTCTCTCCA	3060
CTTAAGTATT	TTAAAAACGG	TTTCCTTAAA	TCTTTGGTTG	TATTTATCTT	ATTTAATGAA	3120
TAGGCAATTG	ATTGTATCGG	CCCTAAAACT	TTATCGTTTG	CTAAGAAAAT	ACCTATCAGT	3180
TCACTAAAAG	AAAGGCTTTT	ATGATAAATT	ACAAAATAAC	ATCCTACAAC	CAAGGGAAC	3240
AGAAAGCAAA	AACCTGAAAT	TAGTACTGCA	ACCAATTTTG	AAAGAACCTC	TGATCGTTTC	3300

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AAATTAAAAG	TAGAATCTTC	TAGTTTATCC	AACTTTTTTAT	CCGACAAACT	AATTATTTCT	3360
TTAGTAACAG	AATAAGATTT	TAATGTCTTA	AAACCATTAA	AAATTTCTTT	TATTATGTGA	3420
GTATACTCTG	CATTGCTGTT	AGAGTACTCA	TTAGCTGAAT	TAGACAACAT	CTTCTTCATA	3480
AAGACAGGTA	CTATAATCGG	CAATGCTGAT	AATACAATAA	ATATTATTGA	nACTAGGAAG	3540
TTTAAATAAA	GCATAAAACT	TAGAGAGACG	ATGAACAACA	ATATTGAAGA	AATTATTTCA	3600
AAAAATTGTC	TAAAATAGTT	TTCTTCGATT	AATCTCAAAT	CATTTGACAA	AACTGAAATA	3660
ATAGATGAGT	AATCTTTAAC	CATTTGAGAA	GAAAGATACT	GTTCTCTAAA	ATATCCTTGT	3720
TTAATTTTTA	CATTTATATC	TTTAGTTATT	GATGCTTCCG	TTACTTCTAA	ATAGTAATTT	3780
GATATATAGA	TTGCTGACCA	ACCCAGAATA	CTTATAGCAC	CAAATCTTAG	AACGTCAGAA	3840
AATGAGGAAG	TCTGATTTAA	ACTACCTGCA	TATACAATAA	TTCTTGAGAG	CAAGACACCA	3900
TTAAACGAAG	ATAGAAATAT	TAAAATCCCC	ATTAATATAA	GTTTAGTCTT	TTTTATAAAT	3960
TTTAAATAAT	TCATAAGTTA	TTCTTCCCA	CTTCTTCAAA	GAAATAATTT	AAAGTATCAA	4020
TCATTAAGAG	AACATCTGAT	GGAGTAAAC	CTCCATGACC	AGCTGCTTTG	TTTAAATACA	4080
ACAAACTTTT	AACTCCAATA	GAATTTAATT	TCTTTGACCA	CTCTATCACT	TCGTTATTAT	4140
TAATATATGG	GTCTTTCTCA	CCCAAATAT	TAACTATAAC	AGTATTTGAG	TCTCGTGCCT	4200
TTTCAATATT	TTGCATAGGC	GAATATGACT	TTATATAAGC	CTTTACTTCA	GGGTCTCTAA	4260
TATCTCCCCA	CTCTGCTATT	TCGGTCTTAG	AAAGAGGATC	ATTTGGATTG	TGAAGTGTAT	4320
CATAAGGATT	TATAAATGGC	GAAAATAAGA	GAATGCTTTG	CAATAAATTT	TTTTCCTCGT	4380
TCAACACCGC	ACCAGCAATT	ATTCCACCTG	CACTAGAAGT	TATTAAACCT	AATCGCTTAC	4440
TGTCAATTAC	ATCATTTTCC	CTTAAATAAT	TTACTCCCTC	AATAAAATCT	CTGATAGAAT	4500
TCCATTTGTT	TAACGCCTTT	CCTGAGCGAT	ACCATTCACC	ACCCAAATAG	CCTCCACCTC	4560
TTACATGAAC	TATAGCATAA	ATAAAACCTG	CATCTATTAT	AGATAACATA	ATTTCATCTA	4620
AATCAGAATT	ATCATTTCTA	CCATAAGCCC	CATAGACACT	TAGAATACAT	TTTTTTCTTC	4680
TTGGGAGCTC	ATCCGTATCT	TCACTTTTCC	AAAAATAAGA	AATCGGTATG	CTTACATCAT	4740
AACTGTCTTT	TTTAGTCCAA	ATCACCTTAG	AAAAATATTT	AGTATTATTG	GATTTTATGA	4800
TGGGTCTTTC	AAATTCAGTT	TTTAATGTAT	TTTCTATTAA	ATCAAAACTA	AGTATTTTTT	4860
CGTAAAAAGT	TCTCCTCTCT	AAAAACAGAA	GAACACGATC	AGAAAATGAA	TTTTCATAAA	4920
GTGTTGTCTT	TTCATCAAAT	GTTATCTTAT	TAACACTCAA	CTCCCTCAAA	CTATTATTTT	4980
TAAATGTAGC	AAGATAAAAG	ACGGAATTCG	CTGCGTTTGA	ACAGTCTAAA	AGGATATAAC	5040
GTCCTATACA	GTGAACTCTT	CTAGCCCTAT	CTTGATATGG	TATAGTAATA	GAAACTCTGT	5100

CTCCCGAAGA	AGTTTCCCTT	AGAATTAGTT	GATCTTTCCTT	TTCTTCAGTT	GAAGAGAGCC	5160
CAAGAAAGTA	CTGTGCTTTT	TCTGTACTAA	ATAGAGCGAT	ATCTCTAGGT	GTTGGGGCTA	5220
CCGTTTCTGT	GTAAGAGTGT	CTAACAAAAC	CCGTCCGGTC	GAAACTGTAT	AGAAAAATCC	5280
TGCCTTCTGT	AAAGTCTACT	GACTTTACAA	AACAATTATT	GCTATCAATG	TGGACTATTT	5340
TTAATCGAAA	AGAGCATTCG	TTTTCTTCAA	ACAGTTCCTC	TTCTGTAAAG	CTATCAAAAG	5400
ATTTATAGAA	TAACTTACTT	GGCCTCCCGT	ACTCTTTGGA	GCGAGTATAC	ATAACACCGA	5460
ATTTACCCAA	ATAGAACGAA	CTTTCTACTG	AAATATCTTC	AATGATAAAT	AACTCTTCCA	5520
TAGTATATTT	TTTTATTCCA	ATTAAATTAG	TCGTACGCAG	TGAGGATACA	ACCAAAACTA	5580
TATAACTCTC	ATCAGATGAA	ATCCTAACAT	CCTGTAAGAT	ACTATCATCT	GGCAAAGTAT	5640
ATTTTTCAC	ATCAAAGACA	ATTTTAAGTG	AATTTGAATT	GTCTAAACTG	GAAGAACTAA	5700
CCTTAGGAAT	CCAGTCATTA	TCTTCGACAT	ACCATTCCTT	TATTACACCA	GTATTGGGTA	5760
TACTCCAATT	ATCAAATTGG	TACCAATATC	GCCCTCTCCT	AAATATCAAA	GAATTCCATT	5820
TTTTTAATTC	CTGAAATGAT	GAAGAGATAG	ACCTCTTATA	GTGTGTTTTT	TCCTGTATTG	5880
TATTTAAAAA	TATTTCATTA	CTCTGATTCA	CAAGTATGAC	CCCTTAATAA	TGGTATCTAA	5940
ATATTATATT	TGAGGAAGAA	TCGTCAATTT	ATTATCCATT	ATTGATACCA	ATCCAATTGC	6000
AACACCCGCA	AATCCCGAAG	CAATATCTGT	TGTTATCTTT	AAACCATTAT	CTCCCGCAAT	6060
AACAAATCCT	TCTTCAATTA	CACACAAATA	TCTATAAAGT	TGTTCAATTA	ATTTCTTTTG	6120
TCCTGAAAAG	TTATCATCGA	TATCACTATA	TATATTATTA	GCAACTTCAA	GACCACAAAA	6180
TCCGTTAAAT	AAACCTGGTA	ATACACAAAA	AACTACATCA	GTTGCCCTCT	CTAAAGAAGT	6240
TAAATATTTT	AAGTATTTGC	TTGACAAGAT	TTCTTTATTT	CTATTAATAA	GTAAAAGCAG	6300
GCCAGCACTT	CCAGTTGCTA	GATATGGTAG	TAATCTATGA	CCTTGGCTGT	ACTGCAATGA	6360
ATTATTACTA	TCTACTTTAT	AAGCAACTAA	TTCTTTATCT	ACAGCCAATT	CTAGACCATT	6420
TTTATAGATA	CTTTCACCAG	TTAATTTATA	AGCTTCACCG	AAGAGCCAAG	CTACCCCTGC	6480
GTGACCATAT	AGTAATCCAC	CAAAATTCTC	ATAAGGATCG	TTACTCTGAA	CATCACTAGC	6540
GCCAACTTTA	CAAAAAGTTT	CTGGATTTTC	TATATAATTT	AAAGTATATT	CTCTAAGCCT	6600
AATTAGTATT	TCTTCTCCTA	GTTTATTATC	AATTCCCCCT	TTACTAAGAA	AATACAGTCC	6660
AACCAGTAAA	ATTCCAGCCT	GCCCCACTATA	TAAATTTTTA	TTTTGTGAAT	TCTCAAATAT	6720
CTCTATAAAA	TGAGTTGTAA	AAAGTTCAAC	TGCCCCGATCT	ATCTCCCCAA	ATTCATAAAT	6780
GAGCCAGATT	GTACCAATTT	TACCATCAAA	AAGACCAGAA	AGGGACGATT	TCTTAAAATT	6840

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ATTTACTGCC	TCATTAATAA	CCTGTGTTTCG	AATCTCATAA	TAGTCATCAA	ACTTGAAATT	6900
TTTTACTTTC	TTAGCTAGTT	GTTGATAACT	CCAAAGGATA	GCTAAATCTG	AAAACGCAAT	6960
TCCTTGATTA	AAATTCAGAC	CATAATAATG	AACTGGGAAG	AATCTTGATT	GAAATTCTTT	7020
ACGCCACTGT	CCATAAGTTA	GCGTAAACCC	TCTCAATAAT	TTTATAATAA	AATCTTGTAT	7080
ATCTTGCTCA	CTCTCGATAG	TTCTAATCTC	ATGCATGGGT	TTTAAAACTT	TTTTCTCTGA	7140
AATATTCTCA	ATCTGTGGAC	ATTTAGAATC	TAGATATGAC	AATAAACTTT	CTACATAATC	7200
TATATGTTCT	CTTGATATAAC	CCAAAGACTC	AAATAGTTTT	TTTCCTTCTA	TCCTGGTTTG	7260
ACTTACATAG	TTGTATGTCA	AATCCGATGT	AGTTACTAGT	GGCATGTATA	AATAATGAGC	7320
TATTTGTCTA	ATACCATACC	AATCTATCTC	ACTGGGAAGT	GTTTCTCGCC	ATGCTCTAAA	7380
ACCAGGGGCT	GCAACTTTAT	GTACAACTTT	TTCATCATTT	GAAAAGACAG	CCTGTTCCCA	7440
GTCTATTATA	CTAATCTCAT	CTTCATCCTT	AACCAAGATA	TTTCCTAAAT	GTAAATCTTG	7500
ATGATATACA	TTTTCAGAAT	GAAACTTATT	CGTTAAATCG	ATGAGTTTTT	CTACTATCTT	7560
TGAAACTCTC	AATAGATAAT	CTTTGGTCTT	ATCAACAACT	TCATATAAAG	GAAAATTATT	7620
GGTAACCCAT	CTATTTAGTG	GAACGCCCTT	CATATGTTCA	ATTCCTAAGA	AGGTGTGCTC	7680
CCAGATCTTA	CCGTGCCAGT	ATATTTTAGG	CGTCTCACTC	CATTCATTTA	GAATTTT TAG	7740
TGCTTTGCAC	TCCGAAGCTA	ATTTCTCTGA	AGAATAAGTA	CCATCAAATC	CTAGACCTGT	7800
ATACGGTCTA	GCCTCTTTTA	AAATTATTTT	TTTCCCATCT	TCTTTTAGCC	TAGCATTATA	7860
TATCCCACCA	CTGTTTGAAA	ATCTAATTGC	ATTATCTATA	ATAAAGGGAA	AGTCTCCCTG	7920
TTTTTTATCT	TTCTTGTCAA	GCCATTTATT	CAAAAAGTCA	GGGGGCACTA	TACCTTTTGG	7980
AATTTTAAAT	ACTGGTAAAC	GTTCATCTTT	AACAACTTCA	TCGCCAACAA	TTAATTCATC	8040
AATAGCAACC	TTCTTTTCAT	CATCCCTTGA	CGGCCTAAAC	ACACCATACC	TCAGATATAT	8100
TGGTGCTTCA	TCCCAACGTT	TATCGCTTAA	AATATATGGC	CCATTATATT	GCTTTAAGGC	8160
ACTTTCTAAC	CTTTGCAAAA	CCGACTCTAA	TTCATTTTGA	TTTGGATAAC	ATGTAATAAA	8220
TTTACCAGAA	AATCCTCGAC	TAACCAATTT	CCCGTTTCGC	ATGATAAATT	TGTCTTCTGT	8280
ACTAAGATGT	TTAAATGGAA	TTCGCATTTT	ATGGCAAATT	TTTGCTACAT	CTTGTAACAA	8340
TTCATGTGAA	CTGTTATACT	CTGAACATA	GTGTATTTTC	CACCCTTGTC	TTTCAACAAA	8400
TTTTCCAATA	GGGTATTGAT	AAACCCACTC	ATCATTATTC	ATTACTTCGT	GCCAATTAAA	8460
AGGCAGACTT	ACTTGGTACT	TTATGCTAGT	ATCTGTACTA	TAATCATTAT	TAGTGAAAAA	8520
GAAAGGATGC	TCCAAATTGA	AATTATAATC	CATAACAAAA	TCTCCAAGAA	ATTTTATCAA	8580
ACTTAATATA	TCTATAGCTA	GACAGACTTA	TTTAAATAAA	AAGGGAGAAT	CCTTTGGATT	8640

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CTCCCCATAT AAGCACTAAC ATTCCAACGT GCACATATTG GAACGACATC CATAACTCCA	8700
GAGAATCTCT AAAGTTTACA ATTTAAATGA ATTAACAATT TTCCCAACTA AAAGCACTCC	8760
AGTTACCGCA ACGATTTGTA CTGAATGTAC TAAATCGCAT TCCATCAACT TCATCTGTTT	8820
CGTCAACTTG AACAGATACT AATTGAAGAT TTAATACTTC TTCTGCCATA GCTAGCTCCT	8880
CCTATTTAAA TTTTGGGAT TAAGTACTTT ATCCACCCTC ATTATACTCT CTCCACCAGT	8940
AAAATGCAAG CAATTATACA ATGTTGTCAC ATAGAAAATA ATGTTTCCGT AACTTTTCAA	9000
AGTAACTTCC ATCTCTCTCC CAAAAGTGA AGTTAGTTTT AGAAGTTACC TAAAAATCAG	9060
GTCACCTATT TTAAGAAAGC AGCAAACTAT AACTAGTAG GTTCCACACC AAATGTAGTC	9120
CCATACTGCC CCATAAGTCA GATTTATAGC GCACCATACC TAAAAACATC CCAAGTGAAA	9180
CATACAAACA CCAAGCTAGA ATGGTTCCTG TATGATGTGC TAAGGCAAAT AAAACACTTG	9240
TCAAAGCAAC TCTGATATCT AATTTTCTGA CCAAATTTCCA TAAAATTTCT CGATACAGAA	9300
ATTCTTCAAC CATACTCGCA TTGATTAAGA ACAATAAAAA TGAAAACCAA GGAATTTGAT	9360
GTTGAAGGCC AATTAAGTTT GCTTGATTCG TGCTTCCTTG AGCATGAATC AGACTAAAAC	9420
ATAGACTTAT AATCAGTAGG CTAACAAAT CAACACCAAG CCATTTTCATC CTAGATTTCA	9480
TATTGACCTT ATGCGCTTGT TTGCGTTGGC CATAATCCA TAAAAAGAA ATGAGTGACG	9540
AACCATAGAG AATCTGTAGT ATAGTTmACT CACCGATACA AAGAAATTTT AATAAGTATA	9600
GAGrTACCAA TAsGACATTT ACTTGTTGGA ATATATAAAC TGGAATTATT CTTTTCATAG	9660
TTACCTCCGA AATAAATCTT CATAATCTAA ATCTAATACC TGCACAATCC TTT	9713

(2) INFORMATION FOR SEQ ID NO: 44:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8657 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 44:

AAAGAAATTG TCAGAGAGTG GCTAGATGAA GTAGCAGAGC GGGCTAAGGA CTATCCAGAG	60
TGGGTGGATG TTTTCGAGCG TTGCTACACC GATACCTTGG ACAATACGGT TGAAATCTTA	120
GAAGATGGTT CAACTTTTGT CTTGACTGGG GATATTCCTG CCATGTGGCT TCGAGATTCG	180
ACAGCCCAAC TCAGACCCTA CCTTCATGTA GCTAAAAGAG ATGCCCTCCT GCGTCAGACC	240
ATTGCAGGTT TGGTCAAACG TCAGATGACC TTGGTACTCA AGGATCCCTA TGCTAACTCC	300

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TTCAACATTG	AGGAGAACTG	GAAAGGGCAC	CACGAGACTG	ACCACACAGA	CCTTAACGGC	360
TGGATCTGGG	AGCGCAAGTA	TGAGGTGGAT	TCGCTTTGCT	ATCCTTTGCA	GTTGGCTTAT	420
CTCCTCTGGA	AAGAGACTGG	CGAGACTAGT	CAGTTTGATG	AGATTTTGT	CGCAGCGACT	480
AAGGAAATTC	TCCATCTGTG	GACGGTGGAA	CAAGACCACA	AGAACTCTCC	TTATCGTTTT	540
GTCCGAGATA	CGGACCGTAA	GGAAGACACC	TTGGTAAATG	ATGGCTTTGG	ACCTGACTTT	600
GCAGTGACAG	GTATGACTTG	GTCAGCTTTT	CGTCCGAGTG	ATGACTGTTG	CCAGTATAGT	660
TACTTGATTG	CGTCAAATAT	GTTTGCTGTA	GTAGTCTTGG	GTTATGTGCA	AGAAATCTTC	720
GCAGCATTA	ACCTAGCTGA	TAGCCAGAGT	GTTATTGCTG	ATGCCAAGCG	TCTTCAGGAT	780
GAAATCCAAG	AAGGAATCAA	AAACTACGCT	TACACCACCA	ACAGCAAGGG	CGAAAAGATT	840
TACGCTTTTG	AAGTGGATGG	CCTAGGAAAT	GCCAGCATCA	TGGATGATCC	AAATGTACCA	900
AGTCTACTAG	CTGCGCCCTA	TCTGGGCTAC	TGTTCCGGTCG	ATGATGAAGT	GTATCAAGCT	960
ACTCGTCGTA	CCATTTTGAG	CTCTGAAAAT	CCATACTTCT	ACCAAGGAGA	ATACGCAAGC	1020
GGTCTCGGCA	GTTCTCATA	CTTCTATCGC	TATATCTGGC	CAATCGCCCT	TTCTATCCAA	1080
GGCTTGACAA	CAAGAGATA	GGCAGAGAAA	AAATTCTTGC	TGGATCAGCT	GGTTGCCTGC	1140
GATGGTGGTA	CAGGTGTCAT	GCACGAAAGC	TTTCATGTAG	ATGATCCGAC	CCTCTACTCT	1200
CGTGAATGGT	TCTCCTGGGC	TAACATGATG	TTCTGTGAGT	TGGTCTTGGA	TTACTTGGAT	1260
ATTCGCTAAG	GGGCTCGCTT	TAGCTCAACC	GATTCTTATC	AGAATCACAA	GTTTACATTT	1320
AAAACGTAA	AATTTAAATT	TAGAATGAGG	TTTTACTTCA	TGGAAAATGT	TGTTGTACAT	1380
ATTATCTCAC	ATAGTCACTG	GGATCGTGAG	TGGTACTTGC	CTTTTGAAAG	CCATCGTATG	1440
CAGTTGGTGG	AATTGTTTGA	CAATCTCTTT	GATCTCTTTG	AAAATGACCC	TGAGTTCAAG	1500
AGTTTCCACT	TGGATGGACA	AACTATTGTC	CTTGATGACT	ACTTACAAAT	TCGCCCTGAA	1560
AATCGCGACA	AGGTCCAACG	CTACATTGAC	GAGGGCAAAC	TAAAATTGG	TCCCTTTTAC	1620
ATCTTGCAGG	ATGACTACTT	GATCTCCAGT	GAAGCCAATG	TCCGCAATAC	CTTGATTGGT	1680
CAACAAGAAG	CTGCCAAATG	GGGTAAATCA	ACCCAGATTG	GCTACTTTCC	AGATACCTTT	1740
GGAAATATGG	GACAAGCGCC	TCAAATTCTT	CAAAAATCAG	GCATTCACGT	GGCGGCCTTT	1800
GGTCGTGGTG	TGAAGCCGAT	TGGATTTGAC	AACCAAGTCC	TTGAAGATGA	GCAGTTTACG	1860
TCTCAGTTTT	CAGAAATGTA	CTGGCAGGGT	GTGGATGGTA	GTCGTGTTTT	AGGTATTCTC	1920
TTTGCCAACT	GGTACAGTAA	CGGGAATGAA	ATTCCAGTTG	ACAAAGATGA	GGCCTTGACC	1980
TTCTGGAAAC	AAAAATTGTC	AGATGTGCGT	GCCTACGCTT	CGACCAACCA	ATGGTTGATG	2040
ATGAACGGCT	GTGACCACCA	GCCTGTACAG	AAAAATCTGA	GCGAAGCCAT	TCGTGTGGCA	2100

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AATGAACTCT	TCCCGGATGT	AATCTTTGTT	CATAGTTCTT	TTGATGAATA	TGTTCAAGCT	2160
GTAGAAGGTG	CGCTTCCTGA	ACACTTATCA	ACTGTTACAG	GCGAGTTGAC	CAGTCAGGAA	2220
ACAGATGGCT	GGTACACACT	TGCCAACACT	TCTTCATCCC	GCATTTACCT	AAAACAAGCC	2280
TTCCAAGAAA	ATAGCAACCT	CCTAGAGCAA	GTGGTAGAAC	CCTTGACTAT	TATCACTGGT	2340
GGACACAACC	ACAAGGACCA	GTTGACCTAT	GCTTGAAAAA	CACTTTTGCA	GAATGCGCCA	2400
CATGATAGTA	TCTGTGGCTG	TAGCGTGGAC	GAAGTTCACC	GCGAGATGGA	AACGCGTTTT	2460
GCCAAGGTCA	ACCAAGTAGG	AACTTTGTT	AAAAGTAACT	TGCTCAACGA	GTGGAAGGGT	2520
AAAATTGCTA	CGGATAAGGC	TCAAAGTGAC	TATCTCTTTA	CTGTCATTAA	CACAGGCTTG	2580
CATGATAAGG	TCGATACTGT	CAGCACAGTG	ATTGATGTGG	CGACTTGTGA	TTTCAAGGAA	2640
TTGCACCCAA	CAGAAGGCTA	CAAAAAGATG	GCTGCTCTTA	TCTTGCCAAG	TTACCGTGTG	2700
GAGGACTTGG	ATGGTCGTCC	TGTAGAGGCT	ACAATCGAAG	ACCTCGGAGC	TAATTTTGAG	2760
TATAATTTAC	CAAAAGACAA	GTTCCGCCAA	GCTCGTATTG	CTCGTCAAGT	GCGCGTGACC	2820
ATTCCAGTTC	ACCTAGCGCC	GCTTTCTTGG	ACAACCTTCC	AATTGCTGGA	AGGAAAACAA	2880
GAACACCGTG	AGGGTATTTA	CCAAAACGGA	GTGATTGATA	CACCATTCGT	AACGGTGAGT	2940
GTGGATGACA	ACATCACAGT	CTATGACAAG	ACAACTCACG	AAGCCTATGA	AGACTTTATC	3000
CGCTTTGAAG	ACCGTGGGGA	CATCGGAAAC	GAGTATATCT	ATTTCCAACC	AAAAGGAACA	3060
GAGCCAATCT	TTGCAGAGCT	TAAGGGCCAC	GAGGTCTTGG	AAAACACAGC	TTGCTATGCT	3120
AAAATCTTGC	TCAAACATGA	ATTGACCGTG	CCTGTCAGTG	CGGATGAAAA	GCTAGAAGAA	3180
GAGCAACAAG	GTATCATCGA	GTTTATGAAG	CGTGAGGCTG	GACGGTCAGA	AGAATTGACA	3240
AACATTCTTC	TGGAAACTGA	GTTGACTGTC	TTCGTTGACA	ATCCACAAAT	CCGCTTCAAG	3300
ACTCGCTTTA	CTAACACTGC	CAAGGATCAC	CGTATCCGTC	TCTTGGTCAA	GACTCATAAC	3360
ACGCGTCCAA	GCAATGATTC	TGAAAGTATC	TATGAGGTGG	TGACACGACC	AAACAAACCA	3420
GCTGCTTCAT	GGGAAAACCC	TGAAAATCCT	CAACACCAAC	AAGCTTTTGT	CAGTCTGTAT	3480
GACGATGAAA	AAGGGGTGAC	TGTATCCAAC	AAGGGATTGA	ATGAATACGA	AATCCTTGGG	3540
GATAACACCA	TTGCCGTGAC	CATTTTGCGT	GCATCAGGTG	AGCTAGGTGA	CTGGGGCTAC	3600
TTCCCAACGC	CAGAAGCACA	ATGCTTGCGG	GAGTTTGAAG	TCGAGTTTGC	ACTTGAATGC	3660
CACCAAGCCC	AAGAACGCTT	CTCAGCCTAT	CGTCGTGCCA	AAGCCTTGCA	GACACCGTTT	3720
ACCAGCCTTC	AGCTTGCTAG	ACAGGAAGGA	AGCGTG GTTG	CGACTGGTAG	CCTCTTGAGC	3780
CATTCTGTTC	TCAGCATACC	GCAAGTTTGT	CCAACAGCCT	TTAAGGTAGC	TGAAAATGAA	3840

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GAAGGCTATG	TGCTTCGTTA	CTACAATATG	TGTAGTGAAA	ATGTACGTGT	GCCAGAAAGT	3900
CAACATCTCT	TCCTTGACCT	ACTTGAACGA	CCATACCCAG	TTCATTTCAGG	ACTATTGGCT	3960
CCACAAGAGA	TTCGTACAGA	ATTCATCAAA	AAAGAAGAAA	TTTAATTTCA	AAAAGTAAAC	4020
ATCAAAAGAA	AGGAGGGGCG	AAAAAGTAAG	AACTAACTGC	TGATTCGCCC	CTTTTATGGT	4080
AAAAACAATG	ACCATTGCAA	CGATTGATAT	CGGAGGGACT	GGGATTAAGT	TTGCCAGTCT	4140
GACTCCTGAT	GGGAAAATAC	TGGATAAGAC	AAGTATTTCA	ACGCCTGAAA	ACTTGGAGGA	4200
TTTACTAGCG	TGGCTAGATC	AACGCTTGTC	AGAACAGGAT	TACAGTGGGA	TTGCTATGAG	4260
CGTTCCAGGT	GCAGTCAATC	AAGAGACAGG	TGTGATTGAT	GGCTTCAGTG	CGGTGCCCTA	4320
CATCCATGGC	TTTTCTTGGT	ATGAGGCGCT	TAGCTCTTAT	CAGCTACCTG	TCCATTTAGA	4380
AAATGATGCC	AACTGCGTTG	GACTCAGTGA	ACTACTAGCT	CATCCAGAGC	TTGAAAATGC	4440
AGCCTGTGTC	GTGATTGGGA	CAGGGATTGG	CGGAGCCATG	ATTATCAATG	GTAGACTTCA	4500
TCGAGGTCGC	CACGGTCTGG	GTGGAGAATT	TGGCTACATG	ACAACCCTTG	CCCCTGCTGA	4560
AAAACCTAAT	AACTGGTCGC	AACTAGCATC	AACTGGGAAT	ATGGTACGAT	ACGTGATTGA	4620
AAAATCTGGT	CATACTGATT	GGGACGGTCG	CAAGATTTAC	CAAGAGGCCG	CAGCTGGTAA	4680
TATCCTTTGT	CAAGAAGCCA	TTGAGCGCAT	GAACCGCAAT	CTGGCGCAAG	GCTTGCTCAA	4740
TATCCAGTAT	CTGATCGATC	CAGGTGTCAT	CAGTCTGGGT	GGCTCTATCA	GTCAAAATCC	4800
AGATTTTATC	CAAGGTGTCA	AGAAGGCTGT	TGAAGACTTT	GTCGATGCCT	ACGAAGAATA	4860
CACGGTCGCA	CCAGTTATCC	AGGCCTGCAC	CTATCACGCA	GATGCCAATC	TCTACGGTGC	4920
TCTTGTC AAC	TGGCTACAGG	AGGAAAAGCA	ATGGTAAGAT	TTACAGGACT	TAGTCTCAAA	4980
CAAACGCAAG	CTATTGAGGT	TTTAAAAGGT	CACATTTCTC	TACCAGATGT	GGAAGTGGCT	5040
GTCACTCAGT	CTGACCAAGC	ATCTATCTCT	ATCGAGGGTG	AGGAAGGTCA	CTATCAATTG	5100
ACCTACCGCA	AACCTCACCA	ACTTTATCGT	GCCTTGTCCT	TGTTGGTAAC	AGTTCTAGCA	5160
GAAGCTGATA	AAGTAGAGAT	TGAGGAACAA	GCAGCTTACG	AAGATTTGGC	TTACATGGTT	5220
GACTGTTCTC	GAAATGCGGT	GCTGAATGTG	GCTTCTGCCA	AGCAGATGAT	TGAGATATTG	5280
GCTCTCATGG	GCTACTCAAC	CTTTGAGCTT	TACATGGAAG	AACTTACCA	GATTGAAGGG	5340
CAGCCTTACT	TTGGCTATTT	CCGTGGAGCT	TATTCAGCAG	AGGAGTTGCA	GGAAATCGAA	5400
GCCTATGCCC	AACAGTTTGA	CGTGACCTTT	GTACCATGCA	TCCAGACCTT	GGCCCACTTG	5460
TCGGCCTTTG	TCAAATGGGG	TGTCAAGGAA	GTGCAGGAGC	TCCGTGATGT	AGAGGACATT	5520
CTTCTCATTG	GCGAAGAAAA	GGTTTATGAC	TTGATTGATG	GCATGTTTGC	CACGTTGTCT	5580
AAACTGAAGA	CTCGCAAGGT	CAATATCGGG	ATGGACGAAG	CCCACTTGGT	TGGTTTGGGA	5640

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CGCTACCTGA	TTCTGAACGG	TGTTGTGGAT	CGTAGTCTCC	TCATGTGCCA	ACACTTGGAG	5700
CGCGTGCTGG	ATATTGCTGA	CAAATATGGT	TTCCACTGCC	AGATGTGGAG	TGATATGTTC	5760
TTCAAACCTCA	TGTCAGCGGA	TGGCCAGTAC	GACCGTGATG	TGGAAATTCC	AGAGGAAACT	5820
CGTGCTCTACC	TAGACCGTCT	CAAAGACCGT	GTGACTCTGG	TTTACTGGGA	TTATTATCAG	5880
GATAGCGAGG	AAAAATACAA	CCGTAATTTT	CGCAATCATC	ACAAGATTAG	CCATGACCTT	5940
GCATTTGCAG	GGGGAGCTTG	GAAGTGGATT	GGCTTTACAC	CTCACAACCA	TTTTAGCCGT	6000
CTAGTGGCTA	TCGAGGCTAA	TAAAGCCTGC	CGTGCCAATC	AGATTAAAGA	AGTCATCGTA	6060
ACGGGTTGGG	GAGACAATGG	TGGTGAAACT	GCCCAGTTCT	CTATCCTACC	AAGCTTGCAA	6120
ATCTGGGCAG	AACTCAGCTA	TCGCAATGAC	CTAGATGGTT	TGTCTGCGCA	CTTCAAGACC	6180
AATACTGGTC	TAACGGTTGA	GGATTTTATG	CAGATTGACC	TTGCCAACCT	CTTACCAGAC	6240
CTACCAGGCA	ATCTCAGCGG	TATCAATCCC	AACCGCTATG	TTTTTTATCA	GGATATTCTT	6300
TGTCCGATTC	TTGATCAACA	CATGACACCT	GAACAGGACA	AACCGCACTT	CGCTCAGGCT	6360
GCTGAGACGC	TTGCTAACAT	TAAAGAAAAA	GCTGGAAACT	ATGCCCTATCT	CTTTGAAACT	6420
CAGGCCCAGT	TGAATGCTAT	TTTAAGTAGC	AAAGTAGATG	TGGGACGACG	CATTCGTCAG	6480
GCCTACCAAG	CGGATGATAA	AGAAAGTTTA	CAACAAATCG	CCAGACAAGA	ATTACCAGAA	6540
CTTAGAAGCC	AAATTGAAGA	CTTCCATGCC	CTCTTTAGCC	ACCAATGGCT	GAAAGAAAAC	6600
AAGGTCTTTG	GTTTGGATAC	AGTTGACATC	CGTATGGGCG	GACTCTTGCA	ACGCATCAAA	6660
CGAGCAGAAA	GCCGTATCGA	GGTTTATCTG	GCTGGTCAGC	TTGACCGCAT	CGACGAGCTG	6720
GAAGTTGAAA	TCCTACCATT	TACTGACTTC	TACGCAGACA	AGGATTTTCG	AGCAACTACA	6780
GCCAACCAGT	GGCATACCAT	TGCGACAGCG	TCGACGATTT	ATACGACTTA	ATATTCTTCG	6840
AAAATCTCTT	CAAACCACGT	CAGCTTCCAT	CTGCAACCTC	AAAACAGTGT	TTTGAGCAAC	6900
CTGCAGCTAG	CTTCCTAGTT	TGCTCTTTGA	TTTTCATTTA	GTATAAAAAC	AAGAACACCT	6960
TGCTTGGCGC	AGGGTGTTTC	GCGTGAAACA	GAAGAATTAT	CTGGTTTCAA	ATGCTACAGT	7020
TAGACAAACT	TATGATAAAA	TAGCAGAAAG	TGAATGTTTC	CTAAGAGCAA	TTGGAGGTAT	7080
TATGCTACAC	TTAAAATTAG	TAAAACAAGA	AATAGAAGCT	GAAAAGCCAG	CATCTGTAGA	7140
AGCTTGGATC	ATTTCCGTCA	AATTTAAAAA	AGGTTGCTAC	CGACATATAT	AGATTCCAAA	7200
AACAAAAACG	TTAGCGGAAC	TAGCAGATGT	GATTTTATGG	AGTTTTGATT	TTGCAAATGA	7260
TCATGCTCAC	GCATTTTTCA	TGGATAATGT	TGAGTGGAGT	CATGCAGATT	CTTACTTTCG	7320
TAGCTTTGTT	AGTGACGATG	TTGAAGAACG	TTACACAGAA	AATGTCTATC	TGGATAGCCT	7380

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AAGTGTCAAA	CAAAAATTTA	AGTTTATTTT	CGACTTCGGT	GATGAATGGC	GTTTTGAATG	7440
CCAAGTGCTG	AGAGAAATCG	AGACAGAGGA	CGAAGAAGCT	TATCTCGTAC	GTTCGGTTGG	7500
AACGTCGCCA	GAACAATATC	CAGATTATGA	TGGTTTTGAC	TATGAAGAAT	GGTAAAATTG	7560
AAATCAGTCT	GTGTAGGCTT	AGTATTTCAA	TAGACTTCCT	GCAAAACTAG	AATCCTAGTT	7620
CATGATTGAT	AATACCAGCA	ATCAAATTCA	TTCGTAATCC	GAAGCGTTTA	CGATGATTTT	7680
GATAGGTTGT	TGAAAACATT	TTAAACGTTT	TTACTTTGGC	AAAGATGTTC	TCAACCTTGC	7740
TTCTCTCCTT	AGATAGCGCA	TGGTTATAGG	CTTTATCTTC	AGCTGTTAGT	GGCTTGAGTT	7800
TGCTGGATTT	ACGTGAAGTT	TGTGCTTGAG	GACATATCTT	CATGAGCCCT	TGATAACCAC	7860
TGTCAGCCAA	GATTTTACCA	GCTTGTCCGA	TATTTCTGCA	ACTCATTTTG	AACAACCTCA	7920
TATCATGACA	ATAGTTCACA	GTGATATCCA	AAGAAACAAT	TCTCCCTTGA	CTTGTGACAA	7980
TCGCTTGAGC	CTTCATAGCG	TGAAATTTCT	TTTTACCAGA	ATCATTCGCT	AATTCTTTTT	8040
TTAGGGCGAT	TGATTTTTAC	TTCCGTCGCA	TCAATCATTA	CCGTGTCCTC	AGAACTAAGA	8100
GGAGTTCTTG	AAATCGTAAC	ACCACTTTGA	ACAAGAGTTA	CTTCAACCCA	TTGGCTCCGA	8160
CGGATTAAGT	TGCTTTCGTG	AATACCAAAA	TCAGCCGCAA	TTTCTTCATA	AGTGCGGTAT	8220
TCTAGGCTTA	ATTTAGGTTT	TCGTCCACCT	TTTGCGTGTT	TAAGTTGATA	AGCTGTTTTT	8280
AATACAGCTA	ACATCTCTTT	AAAAGTCGTG	CGCTGAACAC	CAACAAGACG	CTTAAATCGT	8340
GTATCAGTTA	ATTGTTTACT	TGCTTCATAA	TTTCGCAGGG	AGTCTATTGA	CTCTTTGGTA	8400
GGTGTCAATG	TTTTTTTCAT	CTATCCCGAG	AATTATTTTC	CCGCCATTTG	TATTTGCAAA	8460
TGCTGAGTAG	GTTTCCCAGA	AAGACTCTGG	AAGATTGTTT	TTAGCTTTTT	TGTATTCTAA	8520
ATCAACCCCT	TCAAATTTTA	AGTCCATATT	TTTCCTTTAC	ATCTGTTTTT	TGTGGTTCTG	8580
GTATTTGTTC	AAGTTGAGTG	ATAATATAGC	GAATTGAATT	TCGAGAGTTT	TTACTCAGTT	8640
AATTCTTTTT	TTAACCC					8657

(2) INFORMATION FOR SEQ ID NO: 45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 45:

TCTATTTTGG	GTATAGACTT	ACCTATAAAG	AAAAATATCT	ATACACTGCC	TTACTAGCTA	60
TACTGAACGA	GTCAACAAAA	ACGATATATA	TTGATGATAT	AAATACAGCA	AGATTTTTTA	120

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ACTTCTTTGG CAATGATATT CCTAATTCGT CTTTAAAAAA AATTGACTAT ATCGCACCTT	180
CAGAAATTGT TTCATTTAGT ACGTACGTTT GACAACGTTT TAAAGTAATT CCTAAAATTT	240
TGGAACATAT ATTAAAAATCA AGTTTTTTTAT TAGAGAATAT AGATGTTTCT GGTACACTG	300
TAAATATTTT AGAAGATCAA TTAACAAAAC ATAGAACAAT CAAAATTAGT AAAAATAAC	360
TGGTTGATCT CATGTATAAA TACCTAACAA AACCACGCGC CTTGCCTGCT GATGGAAAGA	420
AAGGTACAAA TACATGAATA TCAAAGAAAA AATCAAAAAG AATGGCCAAA GAGTTTATTA	480
TGCTAGTGTT TATCTAGGCG TTGACCAACT AACGGGCAAA AAAGCCCGTA CAACTGTTAC	540
AGCAACCACT AAAAAGGGCG TTAAAGTAAA AGCGCGTGAT GCGATCAATA CTTTGTGCTG	600
TAATGGCTAT ACAGTTAAAG ACAAGCCGAC AATTACAACA TATAATGAGC TTGTAAAAGT	660
TTGGTGGGAT AGTTACAAGA ATACAGTTAA GCCAAATACT CGCCAATCCA TGGAGGGATT	720
GGTTAGAGTG CATTTATTGC CTGTATTTGG CGATTACAAG CTATCTAAAC TTACTACGCC	780
TATTCTTCAA CAGCAAGTAA ACAAATGGGC TGACAAGGCA AATAAAGGCG AAAAAGGGGC	840
ATTTGCTAAC TACTCTTTGC TCCATAACAT GAATAAGCGT ATTTTGAAAT ATGGCGTAGC	900
TATCCAGGTA ATACAATACA ACCCAGCTAA TGATGTCATC GTTCCACGCA AACAGCAAAA	960
AGAAAAGGCT GCTGTCAAAT ACTTAGACAA CAAAGAATTA AAACAGTTTC TTGATTATTT	1020
AGATGCTCTG GATCAATCAA ATTATGAGAA CTTATTTGAT GTTGTTCTGT ATAAGACTTT	1080
ATTGGCCACT GGTTGCCGTA TTAGTGAGGC TCTGGCTCTT GAATGGTCTG ATATTGACCT	1140
AGAAAGCGGT GTTATCAGCA TCAATAAGAC ACTAAACCGC TATCAGGAAA TAAACTCACC	1200
TAAATCAAGC GCTGGTTATC GTGATATACC AATAGACAAA GCCACATTAC TTTTACTGAA	1260
ACAATACAAA AACCGTCAAC AAATTCAGTC TTGGAAATTA GGCCGATCTG AAACAGTTGT	1320
ATTCTCTGTA TTTACGGAGA AATATGCTTA TGCTTGTAAC TTACGCAAAC GCCTAAATAA	1380
GCATTTTGAT GCTGCTGGAG TAACTAACGT ATCATTTTAT GGTTCCTGCC ATACACATAC	1440
TACTATGATG CTCTATGCTC AGGTTAGCCC GAAAGATGTT CAGTATAGAT TAGGCCACTC	1500
TAATTTAATG ATCACTGAAA AACTTACTG GCATACTAAC CAAGAGAATG CAAAAAAGC	1560
CGTCTCAAAT TATGAAACAG CTATCAACAA TTTATAAAAA ATAAGGGTGA CCCATTTCCG	1620
GGCTACCCCTC TTACTATACC AAAAATTAGT AGGGGTAGTA AAAAGGGTAT TAAATTATAA	1680
AAAGCACTAA GGGAAAGCGC CCCAAAGTGC TTATTTCAAA GGCTTTATAG CCTATAATCA	1740
CATAAAGAGA TTATTTTTTA AGGTTGTAGA ATGATTTCAA TCCACGATAT TCAGCTACTT	1800
CACCAAGTTG GTCTTCGATA CGAAGCAATT GGTGTATTTT AGCGATGCGG TCTGTACGTG	1860

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AAAGTGAACC	AGTCTTGATT	TGTCCTGCGT	TAGTTGCAAC	TGCAATATCA	GCGATTGTTG	1920
AATCTTCAGT	TTCACCTGAA	CGGTGTGATA	CAACAGCAGT	GTAACCAGCT	TCTTTAGCCA	1980
TTTCGATAGC	TTCAAAAGTT	TCAGTAAGAG	TACCGATTTG	GTTAACTTTG	ATAAGGATTG	2040
AGTTAGCAGC	ACCTTCTTGG	ATACCACGTG	CAAGGTAGTC	AGTGTTTGTT	ACGAAGAAGT	2100
CGTCACCAAC	AAGTTGTACT	TTCTTACCAA	GACGTTCACT	AAGAGCTTTC	CAACCATCCC	2160
AGTCGTTTTT	ATCCATACCA	TCTTCAATAG	TGATGATTGG	GTATTTGTGA	ACCAATTCTT	2220
CAAGGTAGTC	GATTTGTTCT	GCAGATGTAC	GAACAGCAGC	ACCTTCACCT	TCAAATTTAG	2280
TGTAGTCGTA	AACTTTACGT	TCTTTATCGT	AGAATTCTGA	TGAAGCACAG	TCAAATCCGA	2340
TAAATACGTC	TTTACCTGGT	ACATATCCAG	CAGCTTCAAT	CGCAGCAAGG	ATAGTTTCAA	2400
CACCATCTTC	AGTTCCTTCG	AAACGAGGAG	CGAATCCACC	TTCGTCACCT	ACGGCAGTTT	2460
CCAAACCACG	TGATTTAAGG	ATTTTCTTAA	GAGCGTGGAA	GATTTTCAGCA	CCGTAACGAA	2520
GGGCTTCTTT	AAATGTTGGC	GCACCAACTG	GCAAGATCAT	GAAGTCTTGG	AAAGCGATTG	2580
GAGCGTCAGA	GTGAGAACCA	CCGTTGATGA	TGTTTCATCAT	TGGAGTTGGA	AGAACTTTAG	2640
TGTTGAATCC	ACCAAGATAG	CTGTAAAGTG	GGATTTCAAG	GTAGTCAGCA	GCAGCACGAG	2700
CTACAGCGAT	AGACACACCG	AGGATTGCAT	TCGCACCCAA	TTTACCTTTG	TTAGGAGTAC	2760
CGTCAAGTGC	GATCATAGCA	CGGTCAATAG	CTTGTTGATC	ACGTACATCG	TAGCCAATGA	2820
TAGCTTCAGC	AATGATGTTG	TTTACGTTGT	CAACAGCTTT	TTGTGTACCA	AGACCACCGT	2880
AACGAGATTT	GTCACCGTCG	CGAAGTTCAA	CTGCTTCGTG	TTCACCAGTA	GAAGCTCCTG	2940
ATGGAACCAT	ACCACGTCCG	AAAGCACCTG	ATTCAAGTGA	AAGTCTTACT	TCAAGTGTTG	3000
GGTTACCGCG	TGAGTCTAGG	ACTTCGCGAG	CGTAAACATC	AGTAATAATT	GACATTTTTT	3060
ACTCTCCTTA	TGAGTTAAAT	TTTTTACACC	TCTATAATAC	CTTAAAACCC	CTCCTTTTTT	3120
AAGAAAAAAC	GTTATCTTTG	TGCAACTTTT	CCTTAACTTT	ATAAAGTAAT	CGCTTCTTTT	3180
TGTCTGTTTT	ATTCTAACTT	TTATGATATA	CTGTTTTTCAT	GACAGATTTA	TCAAAACAAT	3240
TACTTGAAAA	AGCTCATGGT	GGGTTAAAAA	TAAATCCGGA	TGAGCAAAGA	CGCTATCTTG	3300
GTACTTTTGA	GGAAAGAGTT	CTTGGATATG	TAGATATTGA	CACAGCAAAT	AGCCCTCAGT	3360
TAGAAAAAGG	CTTTTTATTT	ATTTTAGAAA	ACCTTCAGGA	AAAAGCAGAG	CCACTATTTG	3420
TGAAGATTTT	ACCAACTATC	GAATTTGATA	AGCAAGTTTT	CTACTTAAAA	GAAGCAAAAG	3480
AAACTGATAG	TCAAGCCACC	ATAGTATCTG	AAGAGCATAT	TACTTCTCCT	TTTGGCCTGG	3540
TTATTCATAG	CAATGCACCA	GTTCAAGTAG	AAGAAAAAGA	CCTTCGACTT	GCTTTTCCAA	3600
AACTTTGGGA	AGTTAAAAAG	GAAGAACCAG	CCAAAACATC	CTTATGGAAG	AAATGGTTTA	3660

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GCTAAATCTT	GCACATATTT	AATAAGTGCC	CAATATTGGC	AGCCGTGCGC	TCCAGATAGA	3720
AACTGGCATT	TTTCAAAC TA	TCTTCTAAAG	GTTCACTTTT	CTCCAAAATA	GAAAAGACAG	3780
CTTGATATTT	TTCAAATGGT	AGGGGAGGTA	AATCTTCAGC	AAGACTACCG	CAAATAGCAA	3840
TAACAGGAAC	TCCAACAGGG	GTTCTTTTTG	CAACACCTAT	AGGCGCTTTC	CCAGCAAAGC	3900
TTTGACTATC	AAGTCTTCCT	TCTCCAACAA	CAACCAAGTC	AGCATCTGAA	ACTTTCTTAT	3960
CAAAGTTGAT	TAAGTCCAAG	CAGGTATCAA	TTCCAGACAC	GATACTTGCC	TGAGCAAAGG	4020
CACACAAACC	ACCAGCAAGG	CCTCCACCTG	CTCCTGCTCC	TTTAATTTCT	AATGTTGCAG	4080
GTGAGAATTT	TTCATAAAAA	TCTTGATCG	CCTGATCTAC	GACTGCAAAC	ATAGTCGGAT	4140
GTAGACCTTT	TTGATTGCCA	AAAGTGTAAG	TCGCACCTTG	ATGACCACAT	AAGGGACTCA	4200
CGACATCTGC	TAAAATATGA	ATTTGAACAC	CTTCAGGAAT	TTTATAGCAA	TTTTCTGTTG	4260
AAACAGAAGC	TAAGTTTAAT	AAGGATTGAC	CGGAAGCAGG	CAAGACATTT	CCATCCCTAT	4320
CATAAAATTG	ATAACCTAAA	CCAGCAGCAA	TCCCCAGTCC	TCCATCATTA	CTGGCCGTGC	4380
CACCAACACC	GATATAAATA	TCTTTAATCC	CTTTAGAGAT	GAGATGAAGA	ATCAACTCTC	4440
CAATACCACA	AGTTTGGATT	TGAAGTGGAT	TTCGTTTCTC	TAGCGGAATT	TTTCCAAGAC	4500
CAACCAAGTC	AGCTACTTCA	AATAGTGCCA	GTTCCCCTTT	TTGAAAATAG	CGCATGGCTT	4560
CTTTTTGTCC	AAAAGGGTCT	GTCACTTGGA	TCCATTTTTTC	TTTTAGGTCA	AGAGAATGTC	4620
GGATAGCATC	TACAGTACCT	TCTCCCCCAT	CACCAACAGG	GCAGAGGAGA	CATTCTACAT	4680
CTGCTATCGA	TTGTTGGAAG	CCTCTTTTTA	TTGCTTCAGC	TACCTGTTGA	GCTGTCAAGC	4740
TTTCCTTAAA	CGAATCCGGT	GCAATTACAA	TCTTCATATT	TTCCCTCATT	CTAAACAGTC	4800
AATCAAAGGG	AGAACTTCTA	AAAAATCCCT	CTTGTCACAA	TGATGTGGTA	TTTCTTTTTT	4860
GAGCACTTCT	TTGGCACAAA	AGGCGATTCC	TAACCTCGCC	GACTTCAACA	TTAATAGATT	4920
ATTAACCCCA	TCACCGATTG	CCACCGTTCT	TTCTTTAGAA	AGTTTTAGTT	TCTTTCTCCA	4980
TTTTTCCAGA	GTCTCTTTTT	TGACCTGGGG	ACTTATAATT	TGTCCAAC TA	ATTTTCCTGT	5040
TAAAAGACCT	TCTTTGACTT	CAAGCTAGTT	GGCAGTGAAA	TAGGCAATAC	CAAGGGATTT	5100
TGCTAATCTC	TCCAAC TATT	GGTGTAATC	CACCAGACAC	CAGACCAACT	AGGATGCCAT	5160
TCTTTTGGAG	AATAGAGATG	AACTCTGGGA	CATTTAGCGA	TAGATGAATT	GAGTTGAAGA	5220
CGTTATCAAA	GACCAAAATA	GGAAGACCTT	CCAACAAGGA	CACTCTTTTT	CTTAAACTGC	5280
TTTCAAAGAC	CAACTCTCCT	CGCATTGCTC	GACTTGTAAT	CTGCGAAATT	TCCGCCTCAT	5340
GACCTGCCTC	TCTCCCTAAA	AGATCAATCA	CTTCTTCTAG	GATTAAGGTT	CCATCTACAT	5400

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CCAAAACACA	CAAGCCTTTT	ACTTGAGACA	TCAGTTCTCC	TCTCTAAACA	GCCTAAAAAT	5460
CGTATGAAGT	CATCATACGA	TTTTATCTAT	TAATTAAC TA	AACTATGGTA	CAAGTCAAGG	5520
TATGACTTGC	AGGCTGTATC	CCATGAGAAG	TCACTCTCCA	TAGCTTGTTT	TTGTAGGTTT	5580
CTCCAAATGT	CTGGATGGTT	TCTATACAAG	TCCAATGCTG	TTTGGAAAGT	CCAATTTAAC	5640
CAATAAGGAG	ATAGATTGTC	AAAGCTAAAG	CCAGTACCGC	TTCTTTCGAT	TGGATTGAAA	5700
GCGCGAACTG	TATCTCGCAA	GCCTCCAACT	TCATGGACCA	ATGGCAAGGT	TCCATAACGC	5760
ATAGCCATCA	TTTGAGACAA	GCCACACGGT	TCAAAACGAC	TTGGCATGAG	GAAGAGGTCA	5820
CAAGCAGCGT	AGATTTCTTG	AGCAAGTTTG	ACATCAAAAG	TGATATTTGT	TGATAGCTTG	5880
TCTGGGTAAA	TCTGAGCAAA	CCATGAGAAA	GCTCCTTCAA	AGGCTGGATC	GCCAGTTCCC	5940
AAAAGAACAA	TCTGAACATC	TTCTTGCAAG	ATATGGTGAA	GACTTTCGAC	CACCACATCA	6000
AAACCTTTTT	GACGTGTCAA	ACGAGAAACA	ATTCCCACCA	GTGGAACGTC	TGCTCTAACA	6060
GGCAAGCCAA	CTCTTTCTTG	CAATTTTGCC	TTATTTTGG	CTTCCCAGA	CAAATCTTCC	6120
TGATTGAAAT	GATAGTCTAA	AAGAGCATCC	GTCTGAGGAT	TATAAAGATC	AGCATCAATC	6180
CCATTCACGA	TACCAGATAC	TTTACCAGAC	TCCATTTTAA	GAATCTGATC	CAAATTACAT	6240
CCAAACTGAC	TAGTCATAAT	TTCATGAGCA	TAGCTAGGTG	AAACGGTTGA	AACACGGTTC	6300
GCATAGAGAA	TACCTGCCTT	CATCCAGTTC	AGACAGTTGT	TCCATCGAAG	GGTGCCATCA	6360
GCGTAACGTT	CAAAGCCAAC	TCCAAACAAA	TCACCCAACA	TTCTTCTGA	AAATTGTCCT	6420
TGGAATTCTA	AATTATGAAT	GGTTAAAACT	GTTTCAATGT	CCTCATAGGC	TTGAATCCAA	6480
CGGTATTTTT	CCTTCAACAA	GAAAGGAATC	ATAGCTGTAT	GGTAGTCATG	AACATGGAGA	6540
AGATCAGGAA	TAAAGTCAAT	CCTTTCCATA	GCCTCAATGG	CAGCCAGTTG	GAAAAAGGCA	6600
AAGCGTTCTC	CGTCATCAAA	ATCACCGTAA	ACATGACCAC	GGAAGAAATA	ATATTGATTG	6660
TCAATAAAGT	AGAAGGTTAC	ACCATTTAAT	ACTGTTTTCT	TAATTCCACA	ATACTGTCTG	6720
CGCCAACCAA	CGCTCACCTC	AAAATGAAGC	ACATCTTCAA	TCTGATTTCC	AAATTTAGCC	6780
TCTACCATAT	CATAGTAGGG	TAAAATCACT	GCAACTTCGT	GCCCAGCTTT	TACCAGTGAT	6840
TTTGGAAGAG	CGCCAATGAC	GTCTCCCAAA	CCACCTGTTT	TTGAAAAGGG	TGCACCCCTC	6900
GCTGCTACAA	ATAAAATTTT	CATGAATGAA	TATCCTCTGT	TACTTTAGCA	CCTTTCTTAA	6960
CCACAACTGG	ATGTTCTGCA	GTTCCCTCGAA	TCACAACACC	ATGCTCAACT	TCAACCCCTT	7020
TGTCCAAGAT	AGCATATTCG	ACCTGAGCCC	CTTCTCCAAT	AACAACACGA	GGGAAGAGCA	7080
GGCTATCTTT	AACCAAGCTA	TCCTTATGGA	CATGAATATT	ACGTGATAGA	ACAGAATTAG	7140
CTACTTGACC	TTCAATAATA	CTACCAGAGG	CAAACTGAGA	AGTGCTTACC	TTAGATGTAT	7200

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TAGCATAGTA	AGTTGGCTCT	TCGTTTTTGA	CCTTTGTATA	AATCTTTTGG	TTTGGTGAGA	7260
AAAGAGAATA	GAATTTTGT	GATTCAAGCA	TATCGATATT	CGCTTGATAA	TAAGATTTAA	7320
CAGAGTGAAT	ATTGGCTAGA	TAGCCCGTGT	ACTCGTAGGC	GAAAGCTCCC	TCTTTTACAG	7380
CCAAATCCCG	TAAAACATAG	CGCAATTTCT	CTGGATGTTC	TTTTTTAGCT	TCTTCTTCCA	7440
AGTGTTCAAT	CAACCAAGGT	GTATCAACGA	CAAAGATATC	TGTAGACATA	TTGAACGTTT	7500
CAGCTGTTGA	CTTGCTATCA	AAGAGTTTAT	GAGAAAGAAC	ATGGTCTGTT	TCATCTACAT	7560
CCAAGATTGC	ATTTACTTCT	GAAATATCTT	TCTTAGCTAG	TTTTTTTATAA	ACTACAGTGA	7620
TAGGCTCTTT	TGTTGTACTA	TGTAGGTGGA	AAACTTGGTT	CAAATCAATG	TTAATAAGAA	7680
CATCGCAGTT	GAGGGCAACC	GTTTGGTTTG	AGCCAGAACG	TTTCAAATAA	GTAAGAAGCT	7740
GTTGGTAGTA	TTCTTTTCCA	ACTGTACTAC	TTTCTACACG	GGTATTGTAA	ATTCCTAGAT	7800
AGTAATGGCT	AAGAAGGGTT	GATAAGCCCC	ACTCGCGTCC	TGAACGAATA	TGGTCAAATA	7860
CTGAGCTGAT	ATTATCCTGC	TGGAAAATAC	CAAAGACACT	ACGAACACCT	GCATTAGCAA	7920
GGCTTGAAAG	TGGGAAGTCA	ATCAAACGAT	ATTTCCCACC	AAATGGCAAA	CTTGCTACTG	7980
GACGGTGGTC	CGTCAATGTC	GACATATTGT	GAAAACCAAC	TGTATTTCCCT	AAAATGGCAG	8040
AATATTTATC	AATCTTCATC	TGTTGCTACC	CCCACTACTT	CATTATATCC	TACAACTTGT	8100
ACTTCATCTG	TTCCATCAAT	TTCGACACCG	TCAGAAATAA	TCGCACCTTC	ACCAATAATG	8160
GCACGTTTAA	TCTTAGCTCC	TTGACCAATG	ATAGCTCCAC	TCATGATAAC	TGAATCAAGG	8220
ACTTCCGCTC	CTTCGCGAAC	TTGCGCGCCT	GTTGAAAGGA	TAGAATGTTT	AACAGTTCCA	8280
TCAACGAAAC	ATCCGTCTAC	AACTAATGAG	TCTTCCACAT	GAGCATTTGC	CCCGAGGAAG	8340
TTTGGTGGTG	AAATCAAGTT	TCTTGAGTAA	ATCTTCCATT	GACGGTTACG	ACTATCCAAG	8400
GCATTTTCTG	GAGAAATATA	CTCCATGTTC	GCTTCCCCAA	GTGACTCAAT	AGTACCAACA	8460
TCTTTCCAAT	AACCACTAAA	TTCGTAAGCA	TAAACACTTT	CACCTGACTC	AAGGTAATTT	8520
GGAATGACAT	TTTTACCAAA	GTCTGACATG	CCAACCTTGC	TCTTTTCAGC	AGCGACTAAC	8580
ATATTACGAA	GGCGTTGCCA	ATCAAAAATG	TAGATTCCCA	TAGAAGCTTT	TGTAGATTTA	8640
GGTTGAGCTG	GTTTTTCTTC	AAATTCAACA	ATACGATTGT	TAGCATCTGT	GTTCATGATA	8700
CCAAAACGGC	TTGCTTCTTT	AAGAGGGACG	TCTAAAACTG	CTACTGTCAA	GCTGGCATTA	8760
TTATCCTTAT	GAGACTGGAG	CATATCATCA	TAGTCCATTT	TGTAGATGTG	ATCCCCAGAC	8820
AAAATCAAGA	CATACTCAGG	ATTGACACTG	TCGATATAGT	CGATATTTTG	GTAAATAGCG	8880
TGACTAGTCC	CCTCAAACCA	ACGATTTCCCT	TCACTTGCAG	AATAAGGTTG	AAGAATAGAG	8940

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ACACCTGAAT	TAATACCGTC	TAGTCCCCAG	CTTGAACCAT	TCCCAATATG	GTTGTTGAGA	9000
GCAAGTGGTT	GATACTGTGT	AACGACCCCA	ACATTGTGAA	TCCCTGAGTT	GGCACAGTTT	9060
GATAGGGCAA	AGTCAATGAT	ACGGTAGCGC	CCACCAAATT	GCACAGCTGG	TTTTGCGATG	9120
CTTTGAGTGA	GTTTACCGAG	ACGAGTTCCT	TGCCCACCAG	CAAGAATCAA	AGCTAACATT	9180
TCATTTTTCA	TTTTCTACTC	CTTTTTGGTT	TTTATTTGTG	ACGGTTTTAG	TAGATTTCAA	9240
GCGACGTTTG	ATTTTCCATA	CACTTGCTCC	CATAGCCGGT	AGGGTAAAGG	TTAAGGTCTG	9300
CTCATAATCT	TTCCATAGTC	CTTCTTGCGT	TTGAACAGTT	TGATTATGTT	CTTTCCAAAC	9360
GCCTCCCCAC	TCTTCCAACT	CAGTATTCCA	TACTTCTTCG	TAAATTCCTG	CAACGGGTAG	9420
TCCGATTGTA	AAATCTTTCC	GCTCAACAGG	TACCATATTA	AAGATACAGA	CTAACATTTT	9480
TCCCTTTTTA	CCCTTACGAA	TAAAGGAAAG	AACACTCTGG	TCTCGATTAT	CCGCATCAAT	9540
GATTTCATA	CCATCATAGC	TGGTATCAAT	TTCCCACAGA	CAGCGATGAT	CTTTGTAAAA	9600
CTGGTTTAGC	TGAGAAGCGA	AATACTTCAT	CTTAGCATTC	ATTGGGTCTT	CTAGGTTAGA	9660
CCATTCCAAC	TGTTCTTCAG	ATTTCCATTC	TAGGAATTGA	CCGTATTTCG	TACCCATGAA	9720
GAGCAATTTT	TTACCAGGGT	GACAAATTTG	GTACGTATAG	AGATTGCGCA	AGCCTGCGAA	9780
TTGATTGTAA	CGATCTCCCC	ACATCTTATG	CATCATACTC	TTCTTGCCAT	GAACCACTTC	9840
ATCGTGCGAG	AATGGCAAGA	GATAATTCTC	CTTGAAAACA	TACATAAAGC	TGAAAGTCAC	9900
CAGGTAAAG	TCATATTTAC	GATAGATCGG	ATCTTCTTCG	TAGAAACGGA	GGATATCATT	9960
CATCCAGCCC	ATGTTCCATT	TGTAGTCAAA	TCCTAGACCA	CCAATCTCTT	TCATTCCCGT	10020
AATCTTGATC	GCAGACGAAC	TTTCTTCTGC	AATCATCATC	ACATCTGGAT	ATTCTAACTT	10080
AATAACCTCA	TTCAAGCGCT	GAAGGAAATA	ATAACCTTCA	TAGTTGAGAT	TTCCGCCATC	10140
TTTATTAGGT	GTCCATGGAG	CATCATCATA	GTCCAAATAG	AGCATGTTGC	TAACAGCATC	10200
CACACGAATA	CCATCCAAAT	GATAGACATC	AATCCAATGC	TTAATGCAAG	AAATTAAGAA	10260
GGACTGGACT	TCATTTTTTC	CAAGGTCAAA	ATTAAGGGCA	CCCCAACCAT	GGTTATGAGC	10320
CTTATTATGG	TCTTGGTATT	CAAAAGTCGG	TGTCCCATCA	TAATAGGCTA	AGGCATCATC	10380
GTTGATGGTA	AAGTGACTGG	TACCCAGTCC	ACAATAACCC	CAATATTATG	GGTATGACAC	10440
TCCTCGACAA	AATCTTGAAA	CTCCTCTGGT	CGGCCATAAG	CATGCTCTAA	AGCGAAGTAA	10500
CCCATAAGCT	GATACCCCCA	ACTCAAGCCC	AAAGGATGGG	ACATCAAGGG	CATAAACTCA	10560
ATATGAGTAT	AGTTCATTTT	AACGAGATAA	GGAATGAGTT	CATCCTTGAG	CTGGGCAAAA	10620
CTATAAGGAC	TGCCATCAGA	ATTTCTTTTC	CATGATCCAG	CGTGAAC TTC	ATAAATATTG	10680
ACAGGACGCT	CTTCAAAGCC	CCAACGTTTT	CTTCGTGCCA	GCCAAAGTCC	ATCCTTCCAT	10740

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TTCTTCTCAG	GAAGCTCTGT	TACGATTGCC	CCTGTTCCCTG	GACGAGCCTC	ATACCTGACA	10800
GCAAAAGGGT	CAATCTTCAT	CAGTTGATGA	CCATTTTGAC	GTGTGACATG	ATATTTGTAA	10860
ATATGCCCTT	CTTGAGCCAT	ATTGGTAAAG	ACTTCCCAGA	CCCCAAAATC	ATTTCTTACC	10920
ATTGGAATCT	GATTTTCAAT	CCAGTTGGTA	AAATCACCAA	CCAAGTGAAC	AGCCTGAGCA	10980
TTAGGTGCCC	AAACACGGAA	GGTATAGCCA	TGCTCTCCAT	TTAGTTCTTC	CCTATGTGCT	11040
CCTAGATAAT	GTTGGAGATA	AAAATTTTCA	CCCGTCATAA	AGGTTTTTAA	TGCTTCTCTA	11100
TTATCCATAT	ACTCCCCTTC	TCCTGTAAGC	GTTTTCTATG	TTTTTATTAT	ACTACCTTTT	11160
TAGAGAAGAT	TCAAGTAAAT	TACTATACTT	CTTTAATTAT	TTTGAAAATC	TACAACAAGT	11220
TCACTTACTC	GTTCAATTGT	AAATCAATAT	TTTTTCAAAA	AATTGCGAAA	ACGCCTTTCT	11280
TTTTCTACTA	TAGTGAAATG	AAATAAAACA	TGCGCAAATC	GATTAAGGAA	TTTAATCTAA	11340
TTTCTAACAA	TGTCTTAGAA	ATCAAAGTGT	ACTATTTTAA	CTCC		11384

(2) INFORMATION FOR SEQ ID NO: 46:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 7577 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 46:

TGTTGATTTG	TTACTAGACG	TTGACCAACG	TCCTTCGGCT	GGAAAAGGAA	TTCTCCTTAG	60
TTTCCAACAC	GTTTTCGCCA	TGTTTGGTGC	GACCATCTTG	GTACCATTGA	TTTTGGGAAT	120
GCCTGTATCT	GTTGCCCTTT	TTGCTTCAGG	TGTTGGAACA	CTCATCTACA	TGATTGCTAC	180
TGGTTTTAAA	GTTCCAGTTT	ATCTAGGTTT	TTCATTTGCC	TTTATCACAG	CTATGTCACT	240
GGCTATGAAA	GAAATGGGGG	GGGATGTATC	TGCTGCCCAA	ACAGGGGTTA	TCTTGACTGG	300
TTTGGTCTAT	GTCCTTGTTG	CTACCAGCAT	CCGATTTGTA	GGAACAAAAT	GGATTGATAA	360
ACTCTTGCCA	CCAATCATTA	TCGGTCCTAT	GATCATCGTT	ATCGGTCTTG	GACTTGCAGG	420
TTCAGCTGTT	ACCAATGCAG	GTCTTGTAGC	AGACGGAAAT	TGGAAAAATG	CTCTGGTAGC	480
CGTTGTACT	TTCTTAATTG	CTGCCTTTAT	CAATACAAAA	GGAAAAGGCT	TCCTACGAAT	540
CATTCCATTC	CTCTTTGCCA	TTATCGGTGG	TTACCTTTTC	GACTAACTC	TTGGCTTGGT	600
TGACTTTACA	CCAGTTCTTA	AAGCCAACTG	GTTCGAAATT	CCTGGTTTCT	ACTTGCCATT	660
TAGCACAGGT	GGTGCCCTTA	AAGAGTACAA	TCTTTACTTT	GGTCCAGAAG	CCATCGCTAT	720

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CTTGCCAATC	GCTATCGTAA	CAATTTCTGA	ACATATCGGA	GACCATACTG	TTTTGGGTCA	780
AATCTGTGGT	CGTCAATTCT	TAAAAGAACC	AGGTCTTCAC	CGTACTCTTC	TTGGTGACGG	840
TATCGCAACT	TCTGTTTCTG	CCTTCCTTGG	TGGACCAGCC	AATACAACCT	ACGGAGAAAA	900
TACAGGGGTT	ATCGGTATGA	CTCGTATCGC	TTCTGTCTCA	GTTATCCGTA	ACGCTGCCTT	960
CATCGCGATT	GCCCTCAGCT	TCCTTGGTAA	ATTCACTGCC	TTGATTTCAA	CTATTCCAAA	1020
CGCTGTACTT	GGTGGTATGT	CAATCCTTCT	CTATGGGGTT	ATCGCCAGCA	ATGGTTTGAA	1080
AGTCTTGATT	AAAGAACGTG	TTGATTTTCG	TCAAATGCGA	AACCTCATCA	TCGCAAGTGC	1140
TATGTTGGTT	CTTGGACTTG	GAGGAGCTAT	CCTTAAACTT	GGTCCAGTTA	CACTTTCAGG	1200
TACTGCCCTT	TCAGCCATGA	CAGGAATCAT	CTTGAACCTG	ATCTTGCCAT	ACGAAAATAA	1260
AGACTAAGAG	TCTAAATACA	CCTAATCCAC	TCAGACAGCT	GAGTGGATTT	TTCGTATACC	1320
ATAATAAAAG	TGTCTTAACA	AAATTATTAA	AATCAAAAAA	CGTATAATAT	CAGATATTCT	1380
AAAACCTTGA	TACTGTACGT	TTTATCATAG	AAATTTTAC	TTTATTTTCT	CATCAAATGA	1440
GATTTGCATC	AATCTCTTGT	CTTACTTGCG	TTTCTTCTTC	GCTTTCTTCA	TTTTGTTAGC	1500
CATACGTTTC	ATGGACTGTT	TCATGGCAAA	TTACCAATT	TTACCTTTCA	AACCGCCACC	1560
AAACATCTGG	CTCATATCTG	GCATTCCTGC	TCCTCCGAGA	GCTGATAAGT	CAGGCATACC	1620
GCCTTGTCCC	ATCATTCCTT	CAAGGGCAGA	CATATCCATT	CCTCCCATAT	TTGGCATATT	1680
TTTAGGAAGG	TTATTTGGAT	TAATCCCCAT	TTGCTTCATC	ATTTTATTCA	TATCCCCAGA	1740
CATAACACCC	TGCATGAGCT	GTTTAGCCTG	GTAAAGTCC	TTGATGAATT	TATTGACTTC	1800
GACGAATGTA	TTTCCAGAAC	CAGCAGCAAT	ACGACGGCGA	CGGCTTGGAT	TTAACAAATC	1860
TGGGTTTTCA	CGCTCTTCAG	GTGTCATCGA	AGACACAATG	GCACGTTTAC	GAGCAATCTG	1920
GCGTTCATCC	ACCTTCATGT	TTTGAAGGGC	TGGATTGTTG	GCCATACCTG	GAATCATCTT	1980
GAGCAAGTCT	TCCATCGGCC	CCATATTTTG	CACCTGATCT	AATTGATCGA	TGAAATCATT	2040
AAAATCAAAG	GTGTTTTTCG	GCATCTTCTC	AGCCATTTC	AGGGCTTTTT	GTTTCATCGTA	2100
TTCTTGAGAA	GCTTTCTCAA	TCAAAGTGAG	CATATCCCCC	ATACCAAGGA	TACGGCTAGA	2160
CATGCGGTCT	GGGTGGAAGG	TTTCAATGTC	CGTAATCTTT	TCACCTGTAC	CAGTGAACCT	2220
GATTGGTTTT	CCAGTAATGT	GACGAACAGA	CAGAGCAGCA	CCACCACGAG	TATCGCCATC	2280
AATCTTG GTA	AGGATGACCC	CAGTCACTTC	CAACTGAGCA	TTAAACTCAC	GCGCAACATT	2340
GGCTGCTTCC	TGACCAATCA	TAGCATCAAC	GACAAGCAAG	ATTTTCATTTG	GTTGAGCCAA	2400
TGCTTTCACA	TCACGAAGCT	CATTCATGAG	GAGCTCATCA	ATCTGCAAAC	GACCCGCAGT	2460
ATCAATCAAG	ACATAGTCGT	TATGATTAGT	TTGGGCTTGC	TCCAAACCTT	GACGTACAAT	2520

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CTCAACAGCT GGTACTTCTG TTCCAAGTGC AAAGACAGGC ACATCAATCT GTTGTCCCAA	2580
GGTCTTAAGC TGGTCAATGG CAGCTGGACG ATAAATATCC GCCGCAATCA TCAAAGGACG	2640
AGCATTTTCT TCTTTCTTGA GTTTGTTGGC CAATTTACCA GCAAAGGTTG TTTTACCAGC	2700
CCCTTGTAAG CCAACCATCA TGATGATGGT TGGAATCTTA GGTGACTTGA TAATTTCTGC	2760
CGTATCAGAA CCTAAAACGG CTGTCAATTC CTCATCAACG ATTTTAATAA TCTGTTGCGC	2820
AGGATTAAGT GTATCAATGA CCTCATGCCC GACTGCACGC TCACGAACTT TCTTGATAAA	2880
GTCCTTTACA ACAGGCAAGG CAACGTCGGC CTCGAGCAAG GCCAAGCGAA TTTCTTTGGT	2940
TGCCTCTTGG ACATCAGATT CAGAGATTTT TCCTTTTTTA CGTAGATTTT TAAAGACGTT	3000
CTGCAAACGT TCTGTAAAC TTTCAAATGC CATTTTTCTT CCTCTTATTC TCTATTATCA	3060
ATGCTTGTTA AAATTTCTAT CTGCTCCTGC AGAAAGTCAT CCTTGGGATA GCGCTCCAAA	3120
ATCTGATCAA AAATCTGACT GCGGACAATA TAGTCCGAGT ACATGTGCAA TTTCATCTCA	3180
TAATCTTCCA GAATCTTTTC TGTTCGCTTG ATATTGTCAT AGACAGCCTG ACGACTGACA	3240
CCGAACTCCT CGGCAATTTT AGCAAGGCTG TAATCATCAG CGTAGTAGAG CTCGATATAA	3300
TTCAATTTGCT TATCTGTCAA AAGCGCCGCA TAAAATTCAA AGAGCGCATT CATACGATTG	3360
GTTTTTTTGA TTTCCATAAC TTTTATTATA CCAAAAATTA GCCTAATCTA CCACACTAGG	3420
AAGCCGATCC AAGAAGATAG ATAGCTAAAT TTGAAAAAGA CATGAGCCTA GCCCCAAGTA	3480
ATTTCCAATT GATAGCTGGC AAAGGGATGT CCCTCTTGAT TTTGTAGTTG ATAATCTAGT	3540
TCAATCTTTT GCCTATCAAC TTGATAATGG CTCGTTTGGG TGATAAACTC CTGCATGCCC	3600
ATAGGTGTAG GAATATAGGC TAACTATCG CTATCCTTTA GAAAGCGCAT AATGGTCTTG	3660
GGATTAGAAA ATCGGCTCAT CACAAGTTCT TGACCATGAA ATTTAATCAC TACTTTTTCC	3720
TTTTCCTCAT TATAGAAAAG CAGGTAGCTA TAATCTCCTT TTTCATGCAC TTCCACATCA	3780
TAAAGCTGGT CAATCACTTC CAACTGCTCA TCAAAGTAA TCGTATTTTCG CATCCGAATC	3840
TTACATCAG GCCCTCTTTC TTGTCTCTTG TCCTACTATT TTACCAAAAA GAGCAGGATT	3900
TTGCTATAAT GGTCAATATGA ACGAAAAAGT ATTCCGTGAC CCTGTTCACA ACTACATCCA	3960
TGTCAATAAT CAAATCATCT ATGACTTGAT TAATACAAAA GAATTTTCAGC GTTTGCGCCG	4020
GATCAAACAA CTGGGAACTT CCAGTTATAC CTTCACGGT GGAGAACACA GTCGCTTCTC	4080
TCCTGTCTA GGAGTCTATG AAATGTCACG ACGCATCACA GAGATTTTTCG AAGAAAAATA	4140
TCCTGAGGAA TGAATCCTG CCGAGTCTCT CTGACCATG ACCGCTGCTC TCCTACACGA	4200
CCTTGGGCAT GGTGCCTACT CCCATACTTT TGAACATCTC TTTGATACAG ACCATGAAGC	4260

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CATTACTCAG	GAGATTATTC	AAAATCCTGA	GACAGAGATT	CACCAAGTCC	TGCTACAAGT	4320
GGCACCTGAT	TTCCCAGAAA	AGGTGGCCAG	TGTCATTGAC	CATACCTATC	CTAATAAGCA	4380
GGTCGTGCAG	CTCATTTCTA	GTCAGATTGA	CGCAGATCGC	ATGGACTATC	TCTTGCGCGA	4440
CTCCTATTTT	ACAGGAGCAT	CCTATGGGGA	ATTTGACCTG	ACTCGAATCC	TCCGAGTCAT	4500
TCGTCCTATC	GAAAATGGTA	TCGCCTTTCA	GCGCAATGGC	ATGCACGCCA	TCGAAGACTA	4560
CGTCCTCAGT	CGCTACCAGA	TGTACATGCA	GGTTTATTTT	CACCCCGCAA	CACGCGCCAT	4620
GGAAGTTCTC	CTACAGAATC	TTCTCAAACG	CGCCAAGGAA	CTCTATCCTG	AGGACAAGGA	4680
TTTCTTTGCC	CGAACTTCTC	CACACCTCCT	GCCTTTCTTC	GAAAAAATG	TGACCTTGAC	4740
TGACTATCTG	GCTCTGGATG	ATGGCGTGAT	GAATACCTAC	TTCCAGCTTT	GGATGACCAG	4800
TCCTGACAAG	ATTCTTGCA	ATTTATCGCA	TCGCTTTGTC	AACCGCAAGG	TCTTTAAATC	4860
CATTACCTTT	TCACAAGAGG	ACCAAGATCA	ACTTACTAGC	ATGAGAAAAT	TGGTTGAGGA	4920
TATCGGCTTT	GATCCCGACT	ACTACACTGC	CATTCATAAG	AACTTTGACC	TCCCTTATGA	4980
TATCTATCGT	CCCGAATCTG	AAAACCCACG	GACACAGATT	GAGATTTTAC	AAAAAATGG	5040
AGAACTGGCC	GAACTCTCTA	GCCTGTCTCC	TATCGTCCAA	TCCCTTGCTG	GCAGTCGCCA	5100
CGGAGATAAT	CGCTTTTATT	TTCCAAAAGA	AATGTTGGAC	CAAAACAGCA	TCTTTGCAAG	5160
CATTACCCAG	CAATTTTAC	ACTTGATTGA	GAACGATCAT	TTTACCCCAA	ATAAAAACTA	5220
GAAGAGGAAA	TTTATGAGTA	TTAAACTAAT	TGCCGTTGAT	ATCGACGGAA	CCCTTGTCAA	5280
CAGCCAAAAG	GAAATCACTC	CTGAAGTTTT	TTCTGCCATC	CAAGATGCCA	AAGAAGCTGG	5340
TGTCAAAGTC	GTGATTGCAA	CTGGCCGCCC	TATCGCAGGC	GTTGCCAAAC	TTCTAGACGA	5400
CTTGCAAGTTG	AGAGACGAGG	GGGACTATGT	GGTAACCTTC	AACGGTGCCC	TTGTCCAAGA	5460
AACTGCTACA	GGACATGAGA	TTATCAGCGA	ATCCTTGACT	TATGAGGATT	ATCTAGATAT	5520
GGAATTCCTC	AGTCGCAAGC	TCGGTGTCCA	CATGCATGCC	ATTACCAAGG	ACGGTATCTA	5580
TACTGCAAAT	CGCAATATCG	GAAAATACAC	TGTACACGAA	TCAACCCTCG	TCAGCATGCC	5640
TATCTTCTAC	CGTACCCCTG	AAGAAATGGC	TGGCAAAGAA	ATTGTTAAAT	GTATGTTTAT	5700
CGATGAACCA	GAAATTCTCG	ATGCTGCGAT	TGAAAAAATT	CCAGCAGAAT	TTTACGAGCG	5760
CTACTCCATC	AACAAATCTG	CTCCTTTCTA	CCTCGAACTC	CTTAAAAAGA	ATGTAGACAA	5820
GGGTTCAGCC	ATTACTCACT	TGGCTGAAAA	ACTCGGATTG	ACCAAAGATG	AAACCATGGC	5880
AATCGGTGAT	GAAGAAAATG	ACCGTGCCAT	GCTGGAAGTC	GTTGGAAACC	CCGTTGTCAT	5940
GGAAAATGGA	AATCCAGAAA	TCAAAAAAAT	CGCCAAATAC	ATCACCAAAA	CAAATGACGA	6000
ATCCGGCGTT	GCCCATGCCA	TCCGAACATG	GGTACTGTAA	AAGTATCATT	TTTCAATAAG	6060

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AATTGATTAG CAATAAAATC CAATGAATTT TTTTAGCAAA CTATTTAATT TAAAACAAAA	6120
TAATCATAAT AGAGACACAA ATTCTGATTG TAACAATTTT TACCTAAACG AATTAGAATG	6180
TGGCCTTACT CCTGGGCAAC TCATACTCAT AGATTGGACT CAAAAAACAG GGAGAAATTA	6240
TAATTTCCCA AGATATTTTA AATACTCTCT TCAAATTGAC CCTGAATCTA CACACAATCA	6300
ATTATACAAA TTAGGATACT TCACTAAAAA TAAGACTTTA TCATATCTTA CAGTAGTAGA	6360
ATTAAAAACT ATATTATCTA AACATAATTT AGCTACTTCT GGAAAAAAG CAGAATTAAT	6420
TACAAGAATA ATTAATAATG TTAACATTGA CAATTTAGAT ATTCCGTTTCG AATTTAAGCT	6480
AACAAAAGAA GCACAAAATC TTATTATCGA ACATAGTGAC TATATCAAAG CATACTATGA	6540
TAAAGACATA ACTATGGAAG ATTATTGTAA AGAAAAAAG AATATCTCTT TTAAAGCAAC	6600
TTTTGGTGAT ATAAAATGGA GTCTCTTAAA TAAACAAGCT CATAGGAATA CTGTATCAGG	6660
AGATTTTGGA TGCTTATCTA ACACACGAAA GGCTCAGGGA AGACATTTGG AACAGAAGG	6720
TAATATTAAA CATGCTTTAA TATATTACAT AGAATCTTTG ATAATTACTA TTCAGGATT	6780
AGAAAACAAT TTTTCAGCCA CTGATTATCC AGTATATTAT CCCGATTCTGA TACCTGACTA	6840
CTCACTAAAA CATATTCAAA CATTAATGGA ATCATTATCT GATGACGATT ATGATTTTGC	6900
TTTTGATGAA GCATTATTTT GCTTCTCAAT TTTGAATGCA AATCATTTTT TATCTAAGGA	6960
AGATATTGAC TATTTAAGAG TTAATTTACC TCGTTCCACT GCTGAAGAAA TAAACAATTA	7020
CTTAAAGAAA TATGAATGTT ATAGTCCTTT AAATAATTTA GAACTTGACG ATTTTGAATA	7080
AATTGACTAT ACAAACATTT ATATACTCGA TATAGTCTCA ATTTTATCTG ATGATTGCCC	7140
AAATTTTTC AATAATAAAC GCATAATATT ATGGAGACAA TCCCCTATAT TATGCGTTCT	7200
TTTAATATCA AAGACTTTTT GACAACTTC TTTGATATCT AATTACATGC CCCCTGCAGG	7260
AATCGAACCT GCAACTACTC CTTAGGAGGG AGTTGTTATA TCCATTGAAC TAAGGGAGCT	7320
AGATAAAAAC TCTGCTAAAT GAGCAGAGTT TTTTAGTCGA ATTAACGACG GATTTCTTTG	7380
ATACGAGCTG CTTTACCTTG AAGAGCACGC AAGTAGTACA ATTTTCGCACG ACGTACTTTA	7440
CCGTAACGAA CAACTTCGAT TTTTCAACA CGTGGAGTGT GGATTGGGAA GATACGCTCA	7500
ACACCTACAC CGTTAGAGAT TTTACGAACT GTGTAGTTTT CTGAGATTCC AGCACCTTTA	7560
CGTGCGATAA CAACACG	7577

(2) INFORMATION FOR SEQ ID NO: 47:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4945 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

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(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 47:

CCTCGCTGAT GATTGGTGCT GTTTTATTTG CTGGTCCAGC CTTGGCTGAA GAAACTGCAG	60
TTCCTGAAAA TAGCGGAnCT AATACAGAGC TTGTTTCAGG AGAGAGTGAG CATTTCGACCA	120
ATGAAGCTGA TAAGCAGAAT GAAGGGGAAC ATGCTAGAGA AAACAAGCTA GAAAAGGCAG	180
AAGGAGTAGC GATAGCATCT GAAACTGCTT CGCCAGCAAG CAATGAAGCT GCAACTACTG	240
AAACTGCAGA AGCAGCTAGC GCAGCTAAAC CAGAGGAAAA AGCAAGTGAG GTGGTTGCAG	300
AAACACCATC TGCAGAAGCA AAACCTAAGT CTGACAAGGA AACAGAAGCA AAGCCCGAAG	360
CAACTAACCA AGGGGATGAG TCTAAACCAG CAGCAGAAGC TAATAAGACT GAAAAAGAAG	420
TCCAGCCAGA TGTCCCTAAA AATACAGAAA AAACATTAAA ACCAAAGGAA ATCAAATTTA	480
ATTCTTGGGA AGAATTGTTA AAATGGGAAC CAGGTGCTCG TGAAGATGAT GCTATTAACC	540
GCGGATCTGT TGTCCCTCGCT TCACGTCGGA CAGGTCATTT AGTCAATGAA AAAGCTAGCA	600
AGGAAGCAAA AGTTCAAGCC TTATCAAACA CCAATTCTAA AGCAAAAGAC CATGCTTCTG	660
TTGGTGGAGA AGAGTTCAAG GCCTATGCTT TTGACTATTG GCAATATCTA GATTCAATGG	720
TCTTCTGGGA AGGTCTCGTA CCAACTCCTG ACGTTATTGA TGCAGGTCAC CGTAACGGGG	780
TTCCTGTATA CGGTACACTC TTCTTCAACT GGTCTAATAG TATTGCAGAT CAAGAAAGAT	840
TTGCTGAAGC TTTGAAGCAA GACGCAGATG GTAGCTTCCC AATTGCCCGT AAATTGGTAG	900
ACATGGCCAA GTATTATGGC TATGATGGCT ATTTTCATCAA CCAAGAAACA ACTGGAGATT	960
TGGTTAAACC TCTTGGAGAA AAGATGCGCC AGTTTATGCT CTATAGCAAG GAATATGCTG	1020
CTAAGGTAAA CCATCCAATC AAGTATTCTT GGTACGATGC CATGACCTAT AACTATGGAC	1080
GTTATCATCA AGATGGTTTG GGAGAATACA ACTACCAATT CATGCAACCA GAAGGAGATA	1140
AGGTTCGGC AGATAACTTC TTTGCTAACT TTAAGTGGGA TAAGGCTAAA AATGATTACA	1200
CTATTGCAAC TGCCAACTGG ATTGGTCGTA ATCCTTATGA TGTATTTGCA GGTTTGGAAT	1260
TGCAACAGGG TGGTTCCTAC AAGACAAAGG TTAAGTGGAA TGACATTTTA GACGAAAATG	1320
GGAAATTGCG CCTTCTCTT GGTTTATTTG CCCCAGATAC CATTACAAGT TTAGGAAAAA	1380
CTGGTGAAGA TTATCATAAA AATGAAGATA TCTTCTTTAC AGGTTATCAA GGAGACCCTA	1440
CTGGCCAAAA ACCAGGTGAC AAAGATTGGT ATGGTATTGC TAACCTAGTT GCGGACCGTA	1500
CGCCAGCGGT AGGTAATACT TTTACTACTT CTTTAAATAC AGGTCATGGT AAAAAATGGT	1560
TCGTAGATGG TAAGGTTTCT AAGGATTCTG AGTGGAATTA TCGTTCAGTA TCAGGTGTTC	1620

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TTCCAACATG	GCGCTGGTGG	CAGACTTCAA	CAGGGGAAAA	ACTTCGTGCA	GAATATGATT	1680
TTACAGATGC	CTATAATGGC	GGAAATTCCC	TTAAATTCTC	TGGTGATGTA	GCCGGTAAGA	1740
CAGATCAGGA	TGTGAGACTT	TATTCTACTA	AGTTAGAAGT	AACTGAGAAG	ACCAAAC TTC	1800
GTGTTGCCCA	CAAGGGAGGA	AAAGGTTCTA	AAGTTTATAT	GGCATTCTCT	ACAACTCCAG	1860
ACTACAAATT	CGATGATGCA	GATGCATGGA	AAGAGCTAAC	CCTTTCTGAC	AACTGGACAA	1920
ATGAAGAATT	TGATCTTAGC	TCACTAGCGG	GTAAAACCAT	CTATGCAGTC	AACTATTTT	1980
TCGAGCATGA	AGGTGCTGTA	AAAGATTATC	AGTTTAACCT	AGGACAATTA	ACTATCTCGG	2040
ACAATCACCA	AGAGCCACAA	TCGCCGACAA	GCTTTTCTGT	AGTGAAACAA	TCTCTTAAAA	2100
ATGCCCAAGA	AGCGGAAGCA	GTTGTGCAAT	TTAAAGGCAA	CAAGGATGCA	GATTTCTATG	2160
AAGTTTATGA	AAAAGATGGA	GACAGCTGGA	AATTACTAAC	TGGCTCATCT	TCTACAAC TA	2220
TTTATCTACC	AAAAGTTAGC	CGCTCAGCAA	GTGCTCAGGG	TACAACTCAA	GAAGTGAAGG	2280
TTGTAGCAGT	CGGTAAAAAT	GGAGTTCGTT	CAGAAGCTGC	AACCACAACC	TTTGATTGGG	2340
GTATGACTGT	AAAAGATACC	AGCCTACCAA	AACCACTAGC	TGAAAATATC	GTTCCAGGTG	2400
CAACAGTTAT	TGATAGTACT	TTCCCTAAGA	CTGAAGGTGG	AGAAGGTATT	GAAGGTATGT	2460
TGAACGGTAC	CATTACTAGC	TTGTCAGATA	AATGGTCTTC	AGCTCAGTTG	AGTGGTAGTG	2520
TGGATATTCT	TTTGACCAAG	CCACGTACCG	TTGTTAGATG	GGTCATGGAT	CATGCAGGAG	2580
CTGGTGGTGA	GTCTGTTAAC	GATGGCTTGA	TGAACACTAA	AGACTTTGAC	CTTTATTATA	2640
AAGATGCAGA	TGGTGAGTGG	AAGCTAGCTA	AGGAAGTCCG	TGGTAACAAA	GCACACGTGA	2700
CAGATATCAC	TCTTGATAAA	CCAATCACTG	CTCAAGACTG	GCGCTTGAAT	GTGTGCACTT	2760
CTGACAATGG	AACTCCATGG	AAGGCTATTC	GTATCTATAA	CTGGAAAATG	TATGAAAAGC	2820
TTGATACTGA	GAGTGTCAAT	ATTCCGATGG	CCAAGGCTGC	AGCCCGTTCT	CTAGGCAATA	2880
ACAAGGTACA	AGTTGGCTTT	GCAGATGTAC	CGGCTGGAGC	AACTATTACC	GTTTATGATA	2940
ATCCAAATTC	TCAAAC TCCG	CTCGCAACCT	TGAAGAGCGA	AGTTGGAGGA	GACCTAGCAA	3000
GTGCACCATT	GGATTTGACA	AATCAATCTG	GTCTTCTTTA	TTATCGTACC	CAGTTGCCAG	3060
GCAAGGAAAT	TAGTAATGTC	CTAGCAGTTT	CCGTTCCAAA	AGATGACAGA	AGAATCAAGT	3120
CAGTCAGCCT	AGAAACAGGA	CCTAAGAAAA	CAAGCTACGC	CGAAGGGGAG	GATTTGGACC	3180
TTAGAGGTGG	TGTTCTTCGA	GTTCA GTATG	AAGGAGGAAC	TGAGGACGAA	CTCATTCGCC	3240
TAACTCACGC	AGGTGTATCA	GTATCAGGTT	TTGATACGCA	TCATAAGGGA	GAACAGAATC	3300
TTACTCTCCA	ATATTTGGGA	CAACCGGTAA	ATGCTAATTT	GTCAGTGA CT	GTCACTGGCC	3360

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AAGACGAAGC	AAGTCCGAAA	ACTATTTTGG	GAATTGAAGT	AAGTCAGGAA	CCGAAAAAAG	3420
ATTACCTAGT	TGGTGATAGC	TTAGACTTGT	CTGAAGGACG	CTTTGCAGTG	GCTTATAGCA	3480
ATGACACCAT	GGAAGAACAT	TCCTTTACTG	ATGAGGGAGT	TGAAATTTCT	GGTTACGATG	3540
CTCAAAAGAC	TGGTCGTCAA	ACCTTGACGC	TTCATTACCA	AGGCCATGAA	GTTAGCTTTG	3600
ATGTTTTGGT	ATCTCCAAAA	GCAGCATTGA	ACGATGAGTA	CCTCAAACAA	AAATTAGCAG	3660
AAGTTGAAGC	TGCTAAGAAC	AAGGTGGTCT	ATAACTTTGC	TTCATCAGAA	GTAAAAGAAG	3720
CCTTCTTGAA	AGCAATTGAA	GCGGCCGAAC	AAGTGTTGAA	AGACCATGAA	ACTAGCACCC	3780
AAGATCAAGT	CAATGACCGA	CTTAATAAAT	TGACAGAAGC	TCATAAAGCT	CTGAATGGTC	3840
AAGAGAAATT	TACGGAAGAA	AAGACAGAGC	TTGATCGCTT	AACAGGTGAG	GTTCAAGAAC	3900
TCTTGGCTGC	CAAACCAAAC	CATCCTTCAG	GTTCTGCCCT	AGCTCCGCTT	CTTGAGAAAA	3960
ACAAGGCCTT	GGTTGAAAAA	GTAGATTTGA	GTCCAGAAGA	GCTTACAACA	GCGAAACAGA	4020
GTCTAAAAGA	TCTGGTTGCT	TTATTGAAAG	AAGACAAGCC	AGCAGTCTTT	TCTGATAGTA	4080
AAACAGGTGT	TGAAGTACAC	TTCTCAAATA	AAGAGAAGAC	TGTCATCAAG	GGTTTGAAAG	4140
TAGAGCGTGT	TCAAGCAAGT	GCTGAAGAGA	AGAAATACTT	TGCTGGAGAA	GATGCTCATG	4200
TCTTTGAAAT	AGAAGGTTTG	GATGAAAAAG	GTCAAGATGT	TGATCTCTCT	TATGCTTCTA	4260
TTGTGAAAAT	CCCAATTGAA	AAAGATAAGA	AAGTTAAGAA	AGTATTTTTTC	TTACCTGAAG	4320
GCAAAGAGGC	AGTAGAATTG	GCTTTTGAAC	AAACGGATAG	TCATGTTATC	TTTACAGCAC	4380
CTCACTTTAC	TCATTATGCC	TTTGTTTATG	AATCTGCTGA	AAAACCACAA	CCTGCTAAAC	4440
CAGCACCACA	AAACACAGTC	CTTCCAAAAC	CTACTTATCA	ACCGACTTCT	GATCAACAAA	4500
AGGCTCCTAA	ATTGGAAGTT	CAAGAGGAAA	AGGTGTCCTT	TCATCGTCAA	GAGCATGAAA	4560
ATACTGAGAT	GCTAGTTGGG	GAACAACGAG	TCATCATACA	GGGACGAGAT	GGACTGTTAA	4620
GACATGTCTT	TGAAGTTGAT	GAAAACGGTC	AGCGTCGTCT	TCGTTCAACA	GAAGTCATCC	4680
AAGAAGCGAT	TCCAGAAATT	GTTGAAATTG	GAACAAAAGT	AAAAACAGTA	CCAGCAGTAG	4740
TAGCTACACA	GGAAAAACCA	GCTCAAAATA	CAGCAGTTAA	ATCAGAAGAA	GCAAGCAAAC	4800
AATTGCCAAA	TACAGGAACA	GCTGATGCTA	ATGAAGCCCT	AATAGCAGGC	TTAGCCAGCC	4860
TTGGTCTTGC	TAGTTTAGCC	TTGACCTTGA	GACGGAAAAG	AGAAGATAAA	GATTAAATAT	4920
CGAAAAATCT	TGTGAAATCT	TTCCG				4945

(2) INFORMATION FOR SEQ ID NO: 48:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 25002 base pairs
 - (B) TYPE: nucleic acid

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(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 48:

GACAACTCAA GTAGCTTTTT CTTATTTTGA AAAAGGAGAT CAGAGTTTAA CTATGTCAGA	60
AAAATCACAA TGGGGGTCGA AACTTGGTTT TATTCTAGCA TCTGCTGGCT GGCCATCGGG	120
CTTGGTTCCG TTTGGAAGTT TCCCTACATG ACTGCTGCTA ATGGCGGTGG AGGCTTTTTA	180
CTAATCTTTC TCATTTCCAC TATTTTAATC GGTTTCCCTC TCCTGCTGGC TGAGTTTGCC	240
CTTGCCCGTA GTGCTGGCGT TTCCGCTATC AAAACCTTTG GAAAACTGGG CAAGAATAAC	300
AAGTACAAC TATCGGTTG GATTGGCGCC TTTGCCCTCT TTATCCTCTT ATCTTTTAC	360
AGTGTTATCG GAGGATGGAT TCTAGTCTAT CTAGGTATTG AGTTTGGGAA ATTGTTCCAA	420
CTTGGTGGAA CGGGTGATTA TGCTCAGTTA TTTACTTCAA TCATTTCAAA TCCAGCCATT	480
GCCCTAGGAG CTCAAGCGGC CTTTATCCTA TTGAATATCT TCATTGTATC ACGTGGGGTT	540
CAAAAAGGGA TTGAAAGAGC TTCGAAAGTC ATGATGCCCC TGCTCTTTAT CGTCTTTGTT	600
TTTATCATCG GTCGCTCTCT CAGTTTGCCA AATGCCATGG AAGGGGTTCT TTA CTTCCTC	660
AAACCAGACT TTTCAAACT GACTAGCACT GGTCTCCTCT ATGCTCTGGG ACAATCTTTC	720
TTTGCCCTCT CACTAGGGGT TACAGTCATG TTGACCTATG CTTCTTACTT AGACAAGAAA	780
ACCAATCTAG TCCAGTCAGG AATCTCCATC GTAGCCATGA ATATCTCGAT ATCCATCATG	840
GCAGGTCTAG CCATTTTCCA AGCTCGATCC CCCTTCAATA TCCAGTCTGA AGGGGGACCC	900
AGCCTGCTCT TTATCGTCTT GCCTCAACTC TTTGACAAGA TGCCTTTTGG AACCATTTTC	960
TACGTCCTCT TCCTCTTGCT CTTCTTTTTT GCGACAGTCA CTTTTTCTGT CGTGATGCTG	1020
GAAATCAATG TAGACAATAT CACCAACCAG GATAACAGCA AACGTGCCAA ATGGAGTGTT	1080
ATTTTAGGAA TTTTGACCTT TGTCTTTGGC ATTCCTTCAG CCCTATCTTA CGGTGTCATG	1140
GCGGATGTTT ACATTTTGG TAAGACCTTC TTTGACGCTA TGGACTTCTT GGTTTCCAAT	1200
CTCCTCATGC CATTTGGAGC TCTCTACCTT TCACTTTTTA CAGGCTATAT CTTTAAAAAG	1260
GCTCTTGCAA TGGAGGAACT CCATCTCGAT GAAAGAGCAT GGAAACAAGG ACTGTTCCAA	1320
GTCTGGCTCT TCCTTCTTCG TTTCTTCGTT TCGTCATTCC AATCATCATC ATTGTGGTCT	1380
TCATTGCCCA ATTTATGTAA TCAAAAAGGA CTTGAGTAGT GAACTCAGGC CCTTTCTTTT	1440
TATGGATGGC TAACAATCAA TTCCAAACCT TGCCCTTCCA GAGTCCAAGC TTCAACATCA	1500
CTTGGTAGGA TAAAGTGGCT GCCTTTTTGA ATTGGATAAT TTTCCCGTC AACAGTTAGC	1560

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TGACCTTGAC	CAGCCAAGAC	ACTCAATAAG	CTGTAGTCAG	CTGTCTTTTC	AAAGTCAACT	1620
TTTCCAGTAA	TTTCCCACCT	GTAAACTGCG	AAGAAATCAT	TAGATACAAG	GAGAGTGGAA	1680
CGCAAATCAT	CTGCTTTAAC	AGTTACAGGA	CGGCTATTTG	CTGGCTCACC	AATGTTCAAG	1740
ACATCGATGG	ATTTTTC AAG	ATGAAGTTCA	CGCAAGTTGC	CTTTGTCATC	CTTGCGGTCA	1800
AAGTCATAGA	CGCGATAGGT	GGTATCGCTA	GACTGCTGGG	TTTCAAGGAT	TAAGATACCC	1860
GCCCCGATAG	CGTG CATAGT	CCCGCTTGGT	ACATAGAAGA	AATCTCCAGC	CTTAACAGGG	1920
ACTTTGGTCA	ACAAGTCATC	CCAGTTCTTG	TCCTCGATTT	GCTGGCGGAG	TTCTTCTTTT	1980
GACTTGGCAT	TGTGACCGTA	GATAATCTCT	GAACCTTCAT	CCGCTGCGAT	AATGTACCAG	2040
CATTCTGTTT	TTCCGAGTTC	GCCTTCATGC	TCGAGTCCAT	AAGCATCGTC	TGGGTGAACT	2100
TGGACACTGA	GCCAGTCGTT	GGCATCGAGG	ATCTTGGTCA	AAAGTGGAAA	TACAGGTTCT	2160
GGACGATTGC	CAAATAATTC	ACGGTGTTCC	GCATACAAAG	TAGCAAGATC	TGTTCCCTCG	2220
TAACGACCAT	TGGCAACTTT	AGAGACTCCA	TTTGATGGG	CTGAGATGGC	CCAATATTCT	2280
CCGATTTTTT	CACTTGGGAT	GTCGTAGCCA	AACTCATCAC	GTAGCTTGGC	TCCACCCCAG	2340
ATTTTTTCTT	GCATAACTGA	TTGTAAAAAT	AATGGTTCTG	ACATGTCGAT	CTCCTGTCTG	2400
ATTTTTCTCC	CCTCATTATA	GCAAAAAAAG	AGTTCGAATT	GAAC TCTTTT	TTACATCTTA	2460
TAAAGCAGGG	AGAAGATTTT	ATAAAAAATAG	TAAACAAATG	TGCTCTACCC	GATGCTTGCA	2520
CCATTGCTAT	AAATGACATC	CTTG TACCAA	TAGAAGGACT	TCTTCTTGCT	ACGTTTGAGA	2580
GCTCCGTTTC	CTACATTATC	TCGATCTACA	TAGATAAAGC	CATAGCGCTT	ATTCATTTCC	2640
CCTGTGCCAG	CTGAAACCGG	ATCGATACAG	CCCCAAGTCG	TATAACCAAG	CAAGTCAACC	2700
CCGTCTTGGT	AAATGGCATC	TCGCATGGCC	TTGATGTGGG	CCTCTAAGTA	AGTAATCCGA	2760
TAGTCATCTG	CTACATAACC	ATTCTCATCC	GGTGTATCCA	TAGCACCGAG	TCCATTTTCT	2820
ACGATAATAC	TAAACTAAAA	TCAAAAAGCA	TTATATAATA	GTGATATGAA	ATCAACTAAA	2880
GAAGAAATCC	AAACCATCAA	AACACTTTTA	AAAGACTCTC	GTACAGCTAA	ATATCATAAA	2940
CGCCTTCAAA	TCGTTCTATA	GTAAAATGAA	ATAAGAACAG	TACAAATCGA	TCAGGACAGT	3000
CAAATCGATT	TCTAACAATG	TTTTAGAAAGT	AGGGGTGTAC	TATTCTAGTT	TCAATCTACT	3060
ATATTTTCGTC	TGATGGGCAA	ATCTTATAAA	GAGATTATAG	AACTTTTATA	G TAGTTTGAA	3120
ATAAGATGTG	AACA ACTCTA	TCAGGAAAGT	CAAATTAATT	TATAGAAATA	TTTTAGCAGC	3180
CAAGGTGTAC	TGTTATAGAT	TCAATACACT	ATAGACTGTA	ATCAAACAAC	GATTTGGCGA	3240
AATGTAAAAA	AATATGAGGA	GTTCGGACTC	GACTCTCTCC	TTCAAGAAAC	ACGTGGTGGT	3300
CGTAACCATG	CATATATGAC	AGTTGAGGAA	GAGAAAGCCT	TTCTTGCCCG	CCATTTGAAG	3360

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GCTACAGAGG	CAGGAGAATT	TGTTACAATT	GATGCCTTAT	TTCAGGCTTA	TAAAAAGGAG	3420
TTAGGTCGTT	CCTACACACG	TGATGCCTTC	TATCAACTGT	TGAAGCGCCA	TGGTTGGCGA	3480
AATATTACGC	CACGTCCAGA	ACATCCTAAG	AAAGCAGACG	CTCAAACCAT	TGTTGCGTCT	3540
AAAAATAAAA	TCTCAATCCA	AGAAGGCAAG	AAAGCGTTTT	AAATATAGTA	GACGTTTTTCG	3600
TAAGGTTTGC	TTGATGTACC	AAGCTGAAGC	TGGTTTCGGT	AGAATCAGTA	AACTGGGATC	3660
TTGTTGGGCT	CCAATAGGAG	TAGGTCCACA	TATCCATAGT	CACTATATAC	GAGAATTTTCG	3720
CTATTGTTAT	GGAGCTGTTG	ATGCCTATAC	AGGCGAATCA	TTTTTCTTAA	TAGCTGGTAG	3780
ATGTAATACT	GAGTGGATGA	ACGCCTTTTT	AGAAGAGCTT	TCACAAGCTT	ATCCTTTTAC	3840
TCGTTATGGA	CAATGCTATA	TGGCATAAAT	CAAGTACCTT	AAAGATTCCG	ACTAATATTG	3900
GTTTTGCATT	TATTCCTCCA	TACACACCAG	AGATGAACCC	CATTGAACAA	GTGTGGAAAG	3960
AGATTTCGTAA	ACGTGGATTT	AAGAATAAAG	CCTTTCGAAT	TTTGGAAGAT	GTCATGAATC	4020
AACTCCAAGA	TGTCATACAA	GGATTGGAGA	AGGAGGTGAT	AAAGTCCATC	GTTAATCGGA	4080
GATGGACTAG	AATGCTTTTT	GAAAGCAGAT	GAGTATTATA	TGCAATTTCT	TTATATAAAA	4140
AGACCGGATT	GCTCCGATCT	TTCAATAGTT	CATATTCTCA	ATTTCTATTT	TAAAAATAGC	4200
TAAGGTTAAC	GTCAAATGAC	TACGCGACCT	ATTTCATACG	ATAAAAATCA	AGCACTAGAC	4260
CAGCAGGTCC	TTGAACTAAT	AAGGACTCTG	TTCCCCAATC	GGTTACAGTT	GGTCCGTGTA	4320
AAACCTTTAT	ACCAAGCTCG	TTCAACCGTT	TGTAGTTCTG	GTCTACATCC	TCAACCTCGA	4380
TATGAATAAT	GATTCCTGAC	TGAAAGTTTT	CCAAAGGAAC	CAAATGATTT	TGTGACAACA	4440
TAAGGCAGTG	ACTACCAATC	GTAAACTGAG	CAAAACCATC	ATTAGCATAA	TCTGCCTTTT	4500
TATCCAAGAT	ATGCTCCAAG	TCAGCACAGA	CTTGGGGAAC	ATTTGAAACG	ATAATATCTA	4560
ATTGATTTAA	ATTCATTTAC	TCTCCTCCAT	AAAAAGACCG	GATTGCTCCG	ATCTTTTAAA	4620
GTTCTGCTCT	ATGAAAATCA	AAGAATAAAG	TCTACAAGTT	TCATATTTGA	TTTTCGGCGA	4680
GAGGAATTAT	TTAATTGCGC	GTGATTGCAA	TCCTTCTTCT	TCCAAGAAGA	GACGGAATGG	4740
TACGAGTTCT	TCTGCTTCGT	ATTTTTCCCT	GAAGGCTTTG	ATAGCTTCTT	CTGAGTGAAG	4800
TTTTGGATCC	AATTCAAGTA	CTTCTACTGG	AAGTGGACGG	TGTTGAGTGA	TGCGAGCATC	4860
GATGACAACA	GTTTTACCTT	CTTTGTTCAA	TTTAACAGCT	TCTGCAACAA	CTGCATCGAT	4920
GTCTTCGATA	CGGTCAACTG	TGAATCCAAC	AGCTCCTTGA	GCTTCCGCAA	TTTTAGCGTA	4980
GTCAGCGTTT	GTGAAGTCTA	CACCAAACAA	GTGTTTGTTT	GTATCTTCGT	ATTTGTTCTT	5040
GATGAAGCCG	TACTCAGCAT	TTGAGAAGAC	AAGGTTGATA	ACTGGAAGGT	CGTATTGAAC	5100

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GTTTGTGATA	ACGTCTGGGT	AGCACATGTT	GAATGCTCCG	TCACCCATGA	TGTTCCATAC	5160
TTGGCGATCT	GGATTGTCTT	TCTTAGCAGC	GATACCACCA	GGAAGGGCAA	TACCCATTGT	5220
CGCAAAGAGT	GGAGATGTAC	GCCACATGTT	CTTAGGTGTC	ATGTGAAGGT	GACGAGTAGA	5280
TGTTTGAGTA	GTGTTACCTA	CGTCGATTGA	GTAGATAGCG	TCTTGATCAG	CATGTTTGTT	5340
GATTGCATTG	TAAACTTGAT	ACAATTGCAA	TTCACCCTCA	GTTTTACCTT	CGAGTTTGTT	5400
CATGTAATCA	CGCCAGTTTT	GGTTGTTCTT	AACGTTTGCA	CGCCACCATG	GAGTTGATTC	5460
AACTGGGTTT	ACTTTGTCAA	GGATAGCTTT	AGCTGCTTGA	CCAGCATCAC	CAAGGATTGA	5520
AGCGTCAAGG	GCATGACGTT	TACCAAGTTT	GTAAGGGTCG	ATATCGACTT	GGATGAATTT	5580
TTCAGTGTTT	TTGAATGCTT	CGTAAACTTC	AGCAAATGGG	AAGTTTGAAC	CAAGGAAAAG	5640
AACTGTGTCT	GCTTCAAAGA	CCACTTCGTT	GGCTGGTTTC	CAACCAACAC	GGTAAGCAGA	5700
ACCTGTCAAA	CCTTCATAGT	TCCATTCGAA	AGCTTCAAAG	TTTTTACCAG	TTGTGATGAT	5760
TGGTGCTTTG	ATTTTACGTG	ACAATTCAGT	AATCACTTCA	CCAGCTTTAA	CACCACCAAA	5820
TCCAGCATAG	ATAACTGGGC	GTTTCAGCATT	GTTCAAGATT	TCAACAGCTT	TGTCGATTTT	5880
AACTTCGTTC	AAAGCAGGAG	CGATGAATGA	GCGTTTCGTAT	GAACCTGAAC	CGTAGTATGA	5940
GTTTTTCATCG	ATTTCTTGGA	AACCGAAGTT	TACTGGAATT	TCAACAACAG	CTGGACCTTT	6000
TTTAGAAACT	GCAGCACGGC	AGGCTTCGTC	AATTACTTTT	GGCAATTGCT	CAGCGTAAGC	6060
TACACGTTTG	TTGTAAACAG	CGATACCGTT	GTACATTGGG	TTTTGGTTAA	GCTCTTGGA	6120
AGCATCCATG	TTCAATTTCGT	TAAGTGGACG	TGATCCAAGG	ATCGCTAGGA	ATGGAGTGTT	6180
ATCCATAGCT	GCATCGTAAA	CACCGTTAAT	CAAGTGAGTC	GCACCTGGAC	CACCTGAACC	6240
AACTGCAACC	CCGATTGAGC	CGCCGAATTT	AGCTTGCATA	ACCGCTGCAA	GAGCACCTGT	6300
CTCTTCGTGG	CGAACTTGTA	AGAAACGGAT	ATCTTTGTCT	TCAGCCAAAG	CGTCCATCAA	6360
TGAGCTGAGT	GTTCTTGATG	GGATACCGTA	GATTGTATCT	ACGCCCCATG	TTTTCAATAC	6420
GTTAAGCATT	GCTGCAGATG	CAGTAATTTT	CCCTTGAGTC	ATAATGATAA	CTCTCCTTCA	6480
ATTTTTTTTAA	ACTTGGAGAA	TACGATTACA	TAGAATTGGA	AACGTTCTCC	AAATTTTTTAC	6540
TATTCCTACTG	TATCATATTT	ATGCTGACTT	TTCTAAAAAT	CTGCTCAAAA	CTCTCTATTC	6600
TCTATTCTAA	TACAGTTTTG	AAAGTTCTGT	CATTTCTGTT	TTATAACAAA	GAAATCTAGT	6660
CATTACTTTT	AGTCTATTTT	ACTAAAATTT	AACAGAAGGG	AACTGGTCAG	AACAGATACA	6720
GAACTAAAGG	CCATGGCTAG	ACCTGCCAAT	TCTGGGTTGA	GAGCCAGTCC	AACACCTGAA	6780
AAGACTCCTG	CTGCAATCGG	AATTCGACA	ACATTGTAGA	TAAAAGCCCA	GAAAAGATTG	6840
AGTAGAATTC	GATGAAAGGT	TTTCTTACTC	ATATCAAAGG	CACGAACCAC	TCCTAAAAGA	6900

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TTATTGGTTG	TCAACACCAA	ATCTGCTGAC	TCGATGGCGA	TATCTGTTCC	AGCTCCCATA	6960
GCAATCCCCA	CATCTGCTAC	ACTAAGGGCA	GGAGCGTCAT	TGATACCGTC	CCCAACAAAG	7020
GCTACTTTCC	CTGACTGTTG	CAGTTTATGG	ATTTTCATGGG	CTTTTCTTTC	TGGCAAGACG	7080
CCTGCAATGA	CCTCTTCAAT	TCCGATTTGA	TCTGCAATAG	CACGCGCCAC	ACCAGCATTG	7140
TCTCCTGTCA	GCATGACTGT	TCGGAGACCA	CGTTTTTTTA	GCTGACTGAT	GGCTAGCTTA	7200
GCATTTTCCT	TAGGAATATC	TTGCAAAGCA	AGCAAGCCTT	TGATTTTCATT	GTCAACAGCT	7260
AAGAACACAA	CTGTCTTAGC	TTCTTTTTCT	AGTTCTTCTA	GTTTATCTTG	ATAAGTATTA	7320
GAAATATCCA	TGCCATCCAG	CATTTTAGCA	TTTCCAAGTA	AACTTGTTT	TCCATTGATT	7380
CGCCCTGAAA	CACCTTTCCC	GTGCAAGGAC	TGAAAATTTT	CAACAGTTTG	AACTCAAGT	7440
CCAGCTTCAC	TCGCTCGCTT	AACGATAGCC	TCAGCCAGTG	GGTGTTGAGA	AGCATCTTCC	7500
AAGGAGGCTG	CCAACCCAAA	CACCTTCTACT	TCGTCGCCGA	TGACATCTGT	TACCACAGGT	7560
TTCCCTTCCG	TCAAAGTCCC	GGTCTTATCA	AAGACAAGGG	TTTGAACTTT	CTGGATTTCC	7620
TGTAAGACAG	TTCCATTTTT	GAGGAGAACC	CCCATCTTGG	CACTACGTCC	TGTCCCCACC	7680
ATAAGGGCTG	TCGGTGTTGC	AAGTCCCAAG	GCACAAGGAC	AGGCGATAAT	CAAAACCGCC	7740
ACTCCGTAGA	GAAGAGAGGA	CACAAAGCTA	GCTCCAAGCA	CAACCACACT	ATCCCTGAGC	7800
AAGACGAACC	AAACCCAAAA	GGTCATGATT	CCTAAAATGA	CAACTACTGG	GACAAAAATC	7860
CCTGAAATCT	TATCCGTCAA	GTCTTGAATC	GGCGCACGAC	TTGTCTGAGC	TTTCTTCACA	7920
AAATCCACAA	TCTGAGCCAA	AACAGTCTCT	GAGCCAACCT	TTTCTGCTCT	AAAGACAAGC	7980
GTTCCACTAT	GATTGATGGT	TGAGCCAATG	ACAGTATCTC	CAACTGTCTT	GTCCACAGGC	8040
AGACTCTCAC	CTGTCACCAT	GGATTCTGTC	ATACTAGAGA	CACCTTCTAC	TACGACACCA	8100
TCAACAGCAA	TCTTTTCACC	GGGACGCACT	CGAATCAGGT	CGCCTACCTT	GACTTGTTCC	8160
AAAGGAACTT	GGACATAACT	ATCATCACTC	AAGACTTCTG	CGGTTTTAGC	TTGCAAGTCC	8220
AGTAATTTCT	CCACAGCTTG	GGACGTATTT	TTTCTCATTT	TTTCCTCAAA	AACTGCTCCC	8280
AAAAGAACGA	AAAAGAGGAT	AAATCCAGCA	CTTTCGAAGT	AAACAGGGAG	ACCAGCAAAG	8340
AGAGCAACTA	GGCTATAGAA	ATAAGCCACT	AGAGTTCCCA	GCGCAACCAA	GGTATCCATG	8400
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AACATAATAG	GCGTTGTTGC	TAGAAAGGTT	CCCCAATGCA	TGACTTGATG	ACTAATGCTA	8520
CCTGTCAACA	TCCAATCAT	GAGAATCACA	AGAGGCACAG	TAAAGATACT	AGTAATCCAA	8580
AAACGTTGCA	GGAGAGATAG	AGATTTTCGA	GTCTTCTCAA	CGACTGTATA	GCTTCCCTTT	8640

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TGCATCTTCA	TGCCACAAGA	AAATTCATGT	CGCCCTAATT	CTTGAGGCGT	AAAACGAATG	8700
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TTATAACAGT	TTGAAGGAGT	AGCACGATGA	AAGGTAATCT	CAGCTGGAAT	TCCCTTTTGA	8820
AGCTGGATAT	GGGCTGGATG	ATAGCCTTTT	TCAGCTCGGA	TACGGATTTT	TTGAATGCCA	8880
TTTTCTAAGC	TTGCTTTCAC	AATTTCTGTC	ATAGTCTCCA	CCTACTCTAC	AATCATCTTG	8940
CCGTGCATCA	TGTTCATACC	ACAAGCAAAG	CCAAACTCTC	CAGCCTGTTC	AGGCGTGATT	9000
TCCACTACAT	ACTCTTCCCC	CATTGGCAGG	TTCGCATGTA	CACCAAATC	TGGAAAAACA	9060
ATTTGATCCA	GACATGGTGA	AGGATCCTTG	CGGTCAAAGA	CAATGCGTGC	TGGCACTGAT	9120
TTCTTGAGGA	CAATCAACTC	AGGAGTATAG	CCTCCCATGA	CTTCCACTCG	AATCTCTTGG	9180
TATCCGTTTT	TTTGCTGGGC	TTTTTGTCCA	GATTTTTTCAG	GCTTTTTGAA	AAACCAAAAC	9240
AAGATAAACG	CGATAAGGGC	AATACAAATA	ATGGTTACAA	TACTATTTAA	CATGACGTCT	9300
CCTTTACATA	CAATTACATC	TTACTTCTGT	TACAGCACTT	GATTTCTTCT	CTGAAATCAC	9360
AGCTTCCAAG	TCTTCCAAGT	CAGTCTGAGT	AAATTCACAT	TCTACAATCA	AGTCAGCCAA	9420
CAAATTCCTA	ATCCTACGGG	AACAAACCTT	GTCTTTGATA	TCTTGGACAA	GTAAATCCCG	9480
ACTTTGGTCT	AGAGTTAAAA	GGGCTGAATA	AACAAAGGAC	TTGCCTTCTT	TTTTCCGAGT	9540
CAAACACTCT	TTATCAACCA	GACGAGCCAA	AAGTGTCTGA	ACCGTGGACT	TGGACCAGTC	9600
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AATCTTCATG	ACCTGCCATT	CTGCATCTGA	AATCTGCATT	ACCATACCTC	CAAAATCTAC	9720
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GTAAAGCTGA	GATTAACGAC	TGTTAGATCC	CTCTGACTCA	ATCTAGGTAA	TGCTAGCTGA	9960
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TTGCTTTGAC	CATTGCAGGG	ACTGACCCTA	GTGGTGGTGC	TGGCATTATG	GCAGATTTAA	10140
AGTCATTCCA	AGCGAGAGAT	GTCTATGGAA	TGGCTGTTGT	AACCAGTCTT	GTCGCTCAAA	10200
ATACCAGAGG	TGTTCAAGCTA	ATCGAGCACG	TTTCTCCTCA	AATGTTGAAA	GCCCAATTGG	10260
AGAGTGTCTT	TTCTGATATT	CCACCTCAGG	CTGTAAAAAC	TGGAATGTTG	GCTACTACTG	10320
AAATCATGGA	AATCATCCAA	CCCTATCTTA	AAAAACTGGA	TTGTCCCTAT	GTCCTTGATC	10380
CTGTTATGGT	TGCTACAAGT	GGAGATGCCT	TGATTGACTC	AAATGCTAGA	GACTATCTCA	10440

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AAACAAACTT	ACTACCTCTA	GCAACTATTA	TTACGCCAAA	TCTTCCTGAA	GCAGAAGAGA	10500
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AAGAATTTGG	TCCTCAGTCT	GTGGTTATCA	AAGGCGGACA	TCTCAAAGGT	GGTGCTAAAG	10620
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ACACCCATGG	TACTGGATGT	ACCTTTGCTG	CAGTGATTAC	TGCTGAACTA	GCCAAGGGCA	10740
AGAGTCTTTA	CCAGGCAGTT	GATAAGGCCA	AGGCCTTTAT	CACAAAAGCT	ATTCAAGATG	10800
CCCCTCAACT	CGGTCATGGT	TCTGGTCCAG	TCAACCATAC	AACTTTTAAA	GATTAAGAAA	10860
AAAAACTCTC	TAGTTCCAC	TTTAAGGGAA	TTAGAGAGTT	TTTATACTCT	TCGAAAATCT	10920
CTTCAAAC TA	CGTCAGCTTC	CATCTGCAGC	CTCAAAACAC	TGTTTTGAGC	TGACTTCGTC	10980
AGTCTTATCT	AAAACCTCAA	GGCAGTACTT	TGAGCAACCT	GCGACTAGCT	TTCTAGTTTA	11040
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CTTGCGTTTT	TGCCTCAATA	TCTTCTGCTT	GCATCAAATC	ACGTACAACA	GCTACACCAG	11160
CTATGCCAGT	GCCCATAAGC	TGATCAATAT	TCTCCGAAGT	CAAGCCTCCA	ATAGCAACTA	11220
CTGGAATGGC	AACCGTTTGG	CAAATTGTTT	TCAAGGTCGA	TATCAGAGTA	ATGGGCGCAT	11280
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CCGCTTCCAG	AGCTCTTTTA	ACCGTTTTAG	CGGTGACACC	GAGGATTTTT	TCAGGACCCA	11400
AGACTTTGCG	AGCTACCGAA	ACTGGTAATT	CATCATCTCC	GATATGCAGA	CCTGCTGCAT	11460
CAACCGCAAG	ACAAACATCC	AACCGATCAT	CGATTATCAA	GGGTACCTGA	TAAGCATCTG	11520
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GCAATTGGAC	TATGGTAACC	CCTGAACGGC	AGGCCGTCTC	AACTTTTGCA	AGAAAGCTTT	11640
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AGTACTTGGT	AACGAAATTC	TTCCAATCCC	ATTCTTGAA	CAACTATTTT	CTCAGCAGCG	11820
ATATTGAGAT	AAGAGACTGC	TAAGCAAGAA	GCTTCAAAAC	CAGTCTTTCC	TTGGCTGAGA	11880
AAAACAGCTG	TTAAGGCTCC	AACCAAGTCT	CCTGTCCCTG	TTATCCAGTC	TAATTGAGTA	11940
CAGCCATTTT	CCAGTACAGC	GACCTGATTT	TTGAAACGCA	CGAGGTCTTT	GGGACCTGTG	12000
ACTAAGAAAG	ACATACCAGG	ATAGGTCTGA	CACCAGTCTT	TCAAGACTTG	AAGCAAATCC	12060
TCCGTTTCTT	GATCTTTAGC	ACTCGCATCG	ACCCCAACGC	CGTGGTGCTT	TAATCCAACA	12120
AGACTTCGAA	TTTCTGACAT	GTTTCCTTTA	AGGACCGTAG	GTCTATAGTC	TAAAAGGTCT	12180

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TTAACTAAGC	TCTTACGAAT	GGATGAAGTC	GTTACGCCAA	CCGCATCTAC	TACCATCGGG	12240
AGAGAAGATT	GGTTTGCATA	CGAAGCTGCC	ATGCGGATTG	CTTTTTCCTT	CTCAGCTGAC	12300
AAATGCCCCA	AATTGATGAA	GAGAGCCTGA	CTTTGCTTAG	TAAAATCAAG	AACTTCACGG	12360
GAATCATCTG	CCATGACAGG	TTTGCATCCC	AGAGCCAAAA	TCCCATTGTC	CAGCATCTCA	12420
CAAGAAATCT	CATTGGTAAT	GCAGTGAATG	AGGGAAGTAG	AGCCTATAGG	AAAGGGATTT	12480
GTAAATTCCCT	GCATCAGTCT	ATCCTTTTAC	TAAAGAAATA	TCCCTGCACT	TTTTTAAAGA	12540
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GAGCAGAATA	GTGAAATTTT	CGACCGTACT	TATAAAAGAG	ACCTGCTAGA	AGGGCTCCAA	12780
AAGTCGCTCC	TGTGAGAGCT	AAAGGCGGAA	TCCCTTGAGT	CGTCATACGG	ATAAAGGCTG	12840
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GGGCAATCAT	CATAGATAAA	ATGGTTAATT	TGTGAACTTG	TAATTGGTGC	TTTCTCATGC	13020
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TTCAAGAGTC	TTTTTCATCT	TTGGTTTGAA	GTCTTATCAG	CCAAAAGATG	ATAGATTTCT	13560
GAGAAAGCCT	TCAGATAGTA	GGCATCCTGA	ATCAGGTAAT	AGCGGAAAAT	GGCAGGTTCT	13620
AAATTCCCCCT	CTTGTAATTG	TAAAATAAAG	GGATGATGAA	AGGAAGCCTG	CCAAGCTTTC	13680
TTGGATAATT	CCATCGCAAT	ATCTGTAAAT	TCCATAATAA	CTCCTTTATA	AAAATAGACT	13740
GGTTTGAAGC	AATAAAAAGA	AAAGCAGGTA	GATTAATTTT	GTTTTTTTAG	GAATATAAAA	13800
AGTCCGATAG	CTATTCTTCA	ACTGTGCATG	TTCGTCATAT	CCGTGAGCAG	ATAGAGCTCT	13860
CAGGTAAAGA	TGGCGCCACC	TAAAGACTGT	CATCAGAACC	TTACTGTAAA	TCAAGGGCGA	13920
CCAAAAATGT	AGTTCTTGAC	CACGTAATAG	GCAAGCTTCT	TTGAGGGACT	TGATTTCTTG	13980

CTGAATGAGA	GGAAAAGAAT	TGAATACCAC	AATCAAGGCA	TAGGACCAAG	AGCGTGATAG	14040
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GCCGATACAA	ACTGTCACAA	AGGCCCTCGT	TCCAAGCATG	ACTGCCTGTG	AAGCATCTCC	14160
GTGTAAGTGA	ACTGCCCAGT	AGTTGGCAAA	AGATGGTAAA	ATGGCAAGTA	TGATCATCCA	14220
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ACTGATAATC	GGTGTCTGGG	TTGCTACTTT	GACCATACTA	TCTCACCTCC	CCTTGGGTAT	14400
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GACTAGTCAT	CTCAATCCAA	TAATCAACCA	CAGAAATCAA	AGGGTCTAAA	CGATGACTAA	14520
TGAGCAGAAA	ACTTCTTCCT	TGATTCCTCT	CCTCCACAAT	CCACTTGCAA	AAATAATGGC	14580
AGGCTCTATC	ATCCAAACCT	GCAAAAGGTT	CATCTAGCAA	GATCACGGAA	GCCTTACTGG	14640
TCAAGATGGT	CAGGAGCTGA	AGAATTTTTT	GCTGACCACC	ACTTAATTGA	TAGGGACTCT	14700
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CAGAATCAGG	TCCATCTAAT	TGAAGCTCCT	CTCGCAGACT	GACTCGGATA	AACTGCTTCT	14820
CAGCTTCCTG	AACAACACCA	GTCAGATCAC	GATACAAACT	CTTTTTCTTT	TTCAGGACCG	14880
AACCCTTCCA	AGTAATGCTC	CCCTTATACT	TTTGAAATTG	AAGAATAGAC	CGAAAGAGGG	14940
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CAGCAATTGA	AAAGAGGGGG	CGATTACCAA	GCTCACCAGT	CACACGGTTC	ATATGGAATA	15060
GTTCCGGGCT	AGAAGCAACT	TCCTTTGAAG	CAACCTGTGT	CATCTCATAG	GAAGGGATTT	15120
GAAACACTTC	CCTTAGTTTT	CCGTCTCTTA	GCTCCACCAT	ATGGTCGATA	TAGGCTTTAT	15180
AGTCAGATAA	ATCATGGTCG	CACAAAATAA	CTGTCTTCCC	ATCATAGACC	AACTCTTTTA	15240
GAATCTCCAA	TATCTCGATT	CTGCTCTTGC	GGTCAATGGA	AGCGAAGGGC	TCATCCAAGA	15300
GATAGACCCT	AGGATTCATG	GCAAAGAGGA	CAGCCAGCGC	TGCTTTTTTG	TTTTCCCCAC	15360
CTGATAAGTG	ATGGATGAGA	CGGTGCAAGA	TGTCCTTGCA	ACGACATTGC	TGGACAACCT	15420
CTGCTATTTT	AGAATCAATT	TCCTGAAGGT	GATAGCCGAT	ATTTTCCATG	GTAAAAACCA	15480
ACTCCTCAAA	CAAGCTCTCC	ATGGTAAATT	GATGATTAGG	ATTTTGCAAG	AGAATACCAA	15540
CCGTCTGGAC	ACGTTCGACG	ATAGAAAGCT	GACTGACCTC	GCTCCCATCT	ATCAGGACTT	15600
GACCGCTATA	GGGAAGAGAA	CTAACTTGGG	CAATCATTTG	AAAGAGGCTG	GATTTTCCAG	15660
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CAGAGAAGAT	TGGGGACTGA	ATCGCTCGTA	GTTCCAGACC	CATCTATGCT	TTTCCTCCAG	15780
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CAGAAATAAA	ACGTACCACA	AGCAAGGAAA	GGACAAACGG	AAGGGAAAAG	GCGTAGTAAC	15900
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GAGAGAGCCA	ACTTTCATAG	CGATTCTTAG	TTACGATAAA	ACCAAATTCA	CTTCCCAAAC	16020
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TAGCTAGCTC	AAGTTTTTCT	AAGCCTTCTA	AAGCACCTTC	ACCTTTTTCT	CGAAATTGAA	17400
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GTTCTGTCAA	ATCTTCTCGA	TTTTTACCGA	CACGATTGAG	TTCGTCAACC	AGAAATTGAA	18660
CCCACTCTGC	AAAGAAAGGA	CCTCTGTGGA	GATTGATCCA	TTCCGAATGA	ATATAGACTT	18720
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TGACCAAAAG	ATGGGCATAG	TCTGATGAAG	CCACCGCCGA	ATACATTAGA	TCCTGAAAGG	18840
CTTTTGTTAC	AGGGTGCAAA	GTCACCTCTA	GATAGTCATT	CTCTGCTACT	TTTAACTCTT	18900
TAAAAGCCTT	TTGGAAATAA	CCATCTTCAT	CTGCTTCAAG	AAAGCCTAGT	TGCTTGGCAA	18960
AACGAAGCTT	GGATTCAAGT	TTATCTGCGT	GACTACGCAG	GCACCCAGCA	TGGATAAGAA	19020
GGCATCAAAG	AAGTGATAAT	CTTGAATCAG	ATAGTCCTTT	AAGACCTTAT	TCTCAATTGT	19080
CCCCGCAAAA	AGTTCCTTAA	CAAAACGATG	ATTGATTGCA	GCCTGCCAAT	CCTTCTGACT	19140
GCTTTTTAAT	AATTCTCCAA	CAGTCAAACC	TGGCTGAAAT	GCATAGTCTT	GTGTTTCCAT	19200
ATTTACTTCT	CCTCTCTTTA	CTTGTTAGTA	ATTAATAAAA	CACCAAGAAA	TATCAAGCAA	19260

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AATCGTAATT	CCACTTGATC	CTTTTAAAGC	ACATCGAGAG	CATTTGCAGA	GAGCTAACTA	19320
AACAAGCCTA	TCCAGTTTAT	ATAAACAAAA	AACTCCAATT	ACAATCAAGA	ATTAGAGTTG	19380
ACTTACAAGA	TTAGACCGTT	CATTTCACCA	TACGAAAAAA	CTGTTACAT	TTCCCTTCGC	19440
CAGTCTTAAC	TGTATCAGGT	TCAATGGGTA	TTATCTCAGC	CTAAAGCACC	CCAAATGTCT	19500
CTATTATTTA	ACTACTGAAC	CAGTATAGCA	AAAAATGAAA	GCCCTAGCAA	GATATTTGAC	19560
CGAAAAATAT	CTTTATATAT	AATATATTGA	AACTAGAATA	GTACACCTCT	ACTTATAAAA	19620
CATTGTTAGA	AATCGATTTG	ACTGTCCTGA	TTGATTTGTC	CTATTCTTAT	TTCATTTTAC	19680
TATAGTTTTT	GATAGCAATT	TATTCTTCCA	ATACACGAAG	AAAAACCTCC	ACATTCAGTG	19740
GAGGCAATCT	GTTTTATCAA	TACAATTTTA	AGTCACGAGG	GTCAACTGGG	AAGGTTGGGT	19800
TGTATGGATT	GTGACGGAGC	TTGAAGTGTT	TGACATCTTC	AATGGTCTGA	GTTCCAGACA	19860
ATTGCATAAC	TGTCTTCAAT	TCCGCATTCA	AGTGTTCAAA	GACTTGACGC	ACACCGACAC	19920
TACCACCGAG	AGCCAAGCCA	TAGATGACAG	GGCGTCCAAT	AGCAACCAAG	TCTGCTCCTG	19980
ATGCCAAGGC	TTTAAAGACG	TGTTGACCAC	GACGAACACC	AGAGTCAAAG	ACAATCGGCA	20040
CACGTCTATC	AACTGCTTCT	GCCACTTCTT	GAAGCGAGTC	AAAGGCAGCT	GGTCCACCGT	20100
CGATTTGACG	ACCACCGTGG	TTGGTTACCC	AGATACCAGA	AGCTCCTGCA	GCAAGCGAAC	20160
GTTCAACGTC	CTCACGGCAT	TGTGGTCCCT	TGACATACAC	AGGAAGACCA	GAGTATTCAG	20220
CGATAAATTC	TACATCGCGT	GGAGACAAGC	GTTGTTTAGC	TGATTTGTAA	ACAAAGTCCA	20280
TTGATTTACC	AGCACCTTCT	GGCAGGTATT	CTTCAACAAT	CGGCATGCCA	ACTGGGAAGA	20340
CAAAACCATT	ACGCTTATCC	ACTTCACGAT	TCCCCCTAC	AGTAGCATCT	GCCGTCAAGA	20400
CAATCGCTTT	ATAACCTTCA	GCCTTCACAC	GGTCCATGAT	GTGGCGGTTG	ATACCGTCAT	20460
CCTTACTAAA	GTAAAATTGA	AACCAATGAG	GTGTCCCTTG	GAGGGCTTCA	GAAATCTCTG	20520
GAAGGTCAAC	AGTAGAGTAA	GAACTGGTTG	TATAAAGAGA	ACCAAACCTCA	TGCACACCAC	20580
GCGCAGTCGC	CACTTCCCCC	TGTTCAATTTG	CCAATTTATG	AGCCGCAACA	GGTGCCATAA	20640
TGATTGGAGA	AGATAGTTTT	TCACCTGCAA	ATTCAATCTC	TGTACTTGGA	TTTTCTACAT	20700
TGCAAAGTGT	ATGAGGAACG	ATGAGCTTGT	GGTTAAAGGC	ACGGATATTC	TCTCTTAAAG	20760
TGAAAGTATC	TTCCGCCCCA	CTAGCGATAT	AGCCAAATGC	TGCTTTAGGA	ATAACTTGTT	20820
GCGCCATTGG	CTCCAAATCA	TAGGTATTGA	TGAATCTAC	ATGACCTTCT	GCATTGCTTG	20880
TTTTGTATGA	CATAAAATGT	CCTCCTTAAT	AAGTAAGCGT	TTACTTTGTG	TATTACAAAA	20940
ATATCTTAAC	TCTTTTTTCAA	AACTTTTAAA	ATATTTTGTT	TGGAAATTTT	AGAAATTTTA	21000
TGTCTATGAT	AAAAATCCTT	ATAACGGCAA	TAAAAAATAG	ATATTATCCA	AAGAAGATTT	21060

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TAAGTGCTAC	AATAACTGTA	TTATTTCTAG	ATGGGAGGTT	CTATTTTGG	ATTGATCCAT	21120
TGTTGAACAA	TATCTACCAC	TATATCAAAA	GGCATTCTTT	CTGACCTTGC	ATATTGCAGT	21180
TTGGGGAATT	TTGGGATCCT	TTCTGCTCGG	TTTAATCGTT	AGTATCATCC	GACATTATCG	21240
AATCCTTGTT	TTGGCGCAAG	TAGCGACAGC	CTACATTGAA	TTGTCACGTA	ATACGCCCCCT	21300
TTTGATTCAA	CTCTTCTTTC	TCTACTTCGG	TCTTCCCCGA	ATCGGGATTG	TCCTATCTTC	21360
AGAAGTCTGT	GCAACGCTTG	GGCTTGTCTT	TTTAGGAGGC	TCCTATATGG	CAGAATCTTT	21420
CCGAAGTGGG	CTGGAAGCCA	TCAGTCAAAC	CCAGCAGGAG	ATTGGCCTCG	CTATTGGTCT	21480
GACACCTCTA	CAGGTCTTTT	ACTATGTGGT	TCTTCCGCAA	GCAACAGCGG	TGGCACTCCC	21540
CTCCTTTAGT	GCCAATGTCA	TTTTCCTTAT	CAAGGAAACC	TCTGTTTTCT	CAGCAGTGGC	21600
TTTGCCCGAC	CTCATGTACG	TCGCCAAGGA	TTTGATTGGT	CTCTACTATG	AGACAGACAT	21660
TGCGCTAGCT	ATGTTGGTAG	TTGCTTATCT	AATCATGCTG	CTACCCATCT	CACTGGTCTT	21720
TAGCTGGATA	GAAAGGAGGC	TCCGCCATGC	AGGATTCGGG	AATCCAAGTA	CTCTTTCAAG	21780
GAAATAATCT	CCTGAGAATC	TTACAGGGAT	TGGGCGTTAC	GATTGGGATA	TCCATCCTGT	21840
CTGTCCTCTT	ATCCATGATG	TTCAGAACAG	TCATGGGAAT	CATCATGACC	TCCCATTCTA	21900
GAATCATACG	ATTTTAAACA	CGATTGTATC	TGGAATTTAT	CCGTATCATG	CCCCAGCTGG	21960
TGCTACTCTT	CATCGTTTAC	TTTGGCTTGG	CTCGAAACTT	TAATATCAAT	ATCTCAGGTG	22020
AGACTTCAGC	TATTATCGTT	TTTACCCTCT	GGGGAACAGC	TGAAATGGGA	GACTTGGTAC	22080
GTGGAGCTAT	CACTTCTCTC	CCTAAACATC	AGTTTGAAAG	TGGACAGGCA	CTCGGCTTGA	22140
CTAATGTTCA	ACTTTACTAC	CACATCATCA	TCCCACAAGT	CTTAAGAAGA	CTGCTACCGC	22200
AGGCTATCAA	TCTTGTCACT	CGGATGATTA	AAACCACTTC	ATTAGTTGTT	TTGATTGGGG	22260
TTGTGGAAGT	GACCAAAGTT	GGACAACAAA	TCATCGATAG	CAATCGCCTG	ACCATCCCAA	22320
CTGCTTCATT	TTGGATTTAT	GGAACCATTG	TAATCTTATA	TTTCGCAGTT	TGCTACCCTA	22380
TTTCCAAACT	ATCCACTCAC	TTAGAAAAAC	ATTGGAGAAA	CTAAATGTCT	GAAACTATCT	22440
TAGAAATCAA	GGAACTAAAA	AAATCCTTCG	GAGACAATCC	CATCCTCCAA	GGACTTTCTC	22500
TAGAAATCAA	AAAAGGGGAA	GTTGTTGTCA	TCCTAGGGCC	ATCTGGTTGT	GGGAAAAGTA	22560
CCCTCCTTCG	TTGCCTCAAC	GGCTTAGAAA	GTATTCAAGG	TGGAGATATT	CTTCTGGATG	22620
GTCAGTCTAT	CGTTGAAAAT	AAAAAAGATT	TTCACCTAGT	TCGCCAAAAG	ATTGGCATGG	22680
TCTTTCAAAG	TTATGAACTC	TTTCCCCATC	TGGATGTCTT	ACAAAACCTC	ATCCTAGGCC	22740
CTATCAAAGC	TCAAGGAAGG	GACAAGAAAG	AAGTAACGGA	AGAAGCTTTG	CAATTACTAG	22800

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AGCGTGTCGG	TTTGCTGGAT	AAACAACATA	GCTTTGCCCG	TCAATTATCT	GGTGGACAGA	22860
AGCAACGTGT	TGCAATTGTC	CGTGCCCTCC	TAATGCATCC	AGAAATCATC	CTTTTGTGACG	22920
AGGTGACTGC	TTCGCTGGAT	CCAGAAATGG	TGCGTGAGGT	GCTGGAACCT	ATCAATGATT	22980
TGGCCCAAGA	AGGCCGTACC	ATGATTTTAG	TAACCCACGA	AATGCAGTTT	GCCCAAGCCA	23040
TTACTGACCG	GATTATCTTC	CTCGACCAAG	GGAAAATCGC	TGAAGAAGGA	ACAGCTCAAG	23100
CCTTCTTTAC	CAATCCGCAA	ACCAAACGAG	CCCAGGAATT	TTTAAACGTC	TTTGACTTTA	23160
GCCAATTCGG	CTCATATCTA	TAAAGGAGAT	TCTTATGAAA	CTATTCAAAC	CACTCTTAAC	23220
TGTTTTAGCA	CTTGCCTTTG	CCCTTATCTT	TATCACTGCT	TGTAGCTCAG	GTGGAAACGC	23280
TGGTTCATCC	TCTGGAAAAA	CAACTGCCAA	AGCTCGCACT	ATCGATGAAA	TCAAAAAAAG	23340
CGGTGAACTG	CGAATCGCCG	TGTTTGGAGA	TAAAAAACCG	TTTGGCTACG	TTGACAATGA	23400
TGGTTCTTAC	CAAGGCTACG	CTACGATATT	GAAGTAGGGA	ACCAACTAGC	TCAAGACCTT	23460
GGTGTCAAGG	TTAAATACAT	TTCAGTCGAT	GCTGCCAACC	GTGCGGAATA	CTTGATTTCA	23520
AACAAGGTAG	ATATTACTCT	TGCTAACTTT	ACAGTAACTG	ACGAACGTAA	GAAACAAGTT	23580
GATTTTGCCC	TTCCATATAT	GAAAGTTTCT	CTGGGTGTCG	TATCACCTAA	GACTGGTCTC	23640
ATTACAGACG	TCAAACAAC	TGAAGGTAAA	ACCTTAATTG	TCACAAAAGG	AACGACTGCT	23700
GAGACTTATT	TTGAAAAGAA	TCATCCAGAA	ATCAAACCTC	AAAAATACGA	CCAATACAGT	23760
GACTCTTACC	AAGCTCTTCT	TGACGGACGT	GGAGATGCCT	TTTCAACTGA	CAATACGGAA	23820
GTTCTAGCTT	GGGCGCTTGA	AAATAAAGGA	TTTGAAGTAG	GAATTACTTC	CCTCGGTGAT	23880
CCCGATACCA	TTGCGGCAGC	AGTTCAAAAA	GGCAACCAAG	AATTGCTAGA	CTTCATCAAT	23940
AAAGATATTG	AAAAATTAGG	CAAGGAAAAC	TTCTTCCACA	AGGCCTATGA	AAAGACACTT	24000
CACCCAACCT	ACGGTGACGC	TGCTAAAGCA	GATGACCTGG	TTGTTGAAGG	TGGAAAAGTT	24060
GATTAGTCAT	TAACCTCTTA	AAGGAACTGG	ATTTTAAGCT	CCAATCCCTT	TTTAAGATTT	24120
TACCTATAAC	ATCCTGAGTC	TATCTAAGAT	GTTCAATCTG	AACACAGTGT	ACATACTTTA	24180
TCTTCTATTG	CATATACTTT	ATCACATAAG	ATACGAATAT	CCTCTTCACT	ATGACTAGCA	24240
ATCAAAATTG	TTGTCCCTTT	TTCCTAGAG	AGCTTTCTAA	ACAATGTTCT	CATATTTTCT	24300
AACTTGATT	TATCCAAGGC	ATTCATAGGT	TCATCTAGTA	AAAGAATAGA	GGGATTCTCC	24360
ATAATTGCTT	GAGCAATCCC	TAGCTTTTTTC	CTCATACCTA	GCGAATAAGT	TTTAACTTTC	24420
TGGTCTTTTT	GCTCATATAG	ACCAACTATT	TTCAGTGTAT	CATTGATTTT	CTGATTACCA	24480
ACTACTCCTC	GTATGCTTGC	CAAATATTGT	AAATTCTTAA	AGCCACTATA	ATAATTTATA	24540
AAACCAGGTT	CTTCAATCAA	AGCTCCCAAA	TTAGCTGGAA	TTTTTCTCTC	AGGAACAATA	24600

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TTTTCCCAT	TGATTAACAC	TTCTCCATAA	GACGGACTAT	ATAAACCAGC	TATTAATTTA	24660
AACAATACAC	TTTTCCCTGA	GCCATTCGCA	CCAGTAATTC	CTATAATTTT	CCCCTGTTTA	24720
CAACTAAAGT	TAAGGTTTTG	AAAAACACAT	GTCTTTTTTA	ATTTCAACTC	AATATTTTTT	24780
AATGTAATTA	TTTCATTCAT	TCTATAAACC	TCCTCTTTTG	ACGAGTGAAA	TAGAAAATGC	24840
TTTGAAAAAG	AAAGACTAAA	AATAGCAACT	GAAGAAATAA	ATCTCGTCCT	ATATCTCCAT	24900
TCCCTCGATT	CAAAATATAA	AATAGATAAT	TAGTTCGATT	TCCTACAAAT	AGACCACCAA	24960
ACACAATCAT	GAGTAAAAAG	AACTAACGC	AAGCAAAGTT	CG		25002

(2) INFORMATION FOR SEQ ID NO: 49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 49:

CAGGTACGGT	GAGGCGCAAC	TAAAATATAA	TTTTCATCTT	GATTAGGAAT	TTTATCAGTA	60
TTATGATAGT	GAGCATTGCC	ATTGATGGAC	CATAAGAGCA	ATACAACTAA	TCCACGCAAA	120
TAAGTATAAA	ACATGCGATC	TCCTTCGATT	GTTTTCTTGT	TATTATTATA	CCTTATCAAA	180
GGAGGGCTGG	CAAACCTTTC	CCTTGACTAG	ATACATATTT	AGGATGAAAT	TAGAATTCTG	240
TTAAAAAAA	TGATATAATA	GAATTTATGG	ATAAAAATAA	GATTATGGGA	TTAACCCAAA	300
GAGAAGTCAA	GGAAAGACAG	GCTGAGGGTT	TGGTCAATGA	CTTTACCGCA	TCAGCCAGTA	360
CCAGCACTTG	GCAAATCGTT	AAACGAAATG	TCTTTACCCT	TTTTAACGCT	TTGAACTTTG	420
CCATTGCTTT	GGCTCTTGCC	TTTGTGCAGG	CTTGGAGCAA	TCTGGTCTTC	TTTGCTGTTA	480
TCTGCTTTAA	CGCTTTTTCT	GGGATTGTGA	CCGAGCTACG	AGCCAAACAC	ATGGTGGACA	540
AGCTCAATCT	CATGACCAAG	GAAAAGGTCA	AAACCATCCG	TGATGGTCAG	GAAGTTGCTC	600
TTAATCCTGA	AGAATTAGTG	CTAGGAGATG	TCATTGTTTT	GTCTGCAGGA	GAGCAGATTC	660
CTAGTGATGC	CTTGGTTTTG	GAAGGCTTTG	CGGAAGTCAA	TGAAGCCATG	TTAACGGGAG	720
AAAGTGATTT	GGTGCAAAAG	GAAGTTGACG	GCTTACTTTT	GTCAGGAAGT	TTCCTAGCCA	780
GTGGGTCAGT	TTTATCTCAA	GTTCAACCATG	TCGGTGCAGA	CAACTATGCT	GCCAAACTCA	840
TGCTTGAGGC	TAAGACCGTT	AAACCCATCA	ACTCCCGTAT	CATGAAATCG	CTGGACAAGT	900
TGGCTGGTTT	TACTGGGAAG	ATTATCATTC	CCTTTGGTCT	GGCTCTCTTG	CTGGAAGCCT	960

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TGCTTTTAAA	AGGCCTGCCT	CTCAAGTCAT	CCGTTGTAAA	CTCGTCGACA	GCTCTTTTGG	1020
GAATGTTGCC	TAAGGGAATT	GCCCTTTTGA	CCATTACTTC	GCTCTTGACT	GCAGTGATTA	1080
AGTTGGGCTT	GAAAAAGGTC	TTGGTGCAGG	AGATGTACTC	TGTTGAGACC	TTGGCGCGCG	1140
TGGATATGCT	CTGTCTGGAC	AAGACGGGTA	CCATCACCCA	AGGAAAGATG	CAGGTGGAGG	1200
CTGTTCTTCC	GTTGACGGAA	ACGTATGGTG	AAGAGGCTAT	TGCCAGCATC	TTGACTAGCT	1260
ACATGGCCCA	TAGTGAGGAT	AAGAATCCAA	CTGCCCAAGC	CATTGCGCCAG	CGTTTTGTGG	1320
GAGATGTTGC	TTATCCTATG	ATTTCCAATC	TTCCCTTCTC	GAGCGACCGC	AAGTGGGGGG	1380
CTATGGAGTT	AGAAGGCTTG	GGGACAGTTT	TCTTAGGGGC	ACCTGAGATG	TTGCTTGATT	1440
CTGAAGTCCC	AGAAGCTAGG	GAGGCCTTGG	AGAGAGGATC	ACGTGTCTTG	GTCTTAGCTC	1500
TCAGTCAGGA	GAAATTAGAC	CATCACAAAC	CACAGAAACC	ATCTGATATT	CAGGCTCTAG	1560
CCTTGCTGGA	AATCTTGGAC	CCCATTGAG	AGGGAGCAGC	AGAGACGCTG	GACTATCTCC	1620
GTTCTCAGGA	GGTGGGACTC	AAGATTATCT	CTGGTGACAA	TCCAGTTACG	GTGTCCAGCA	1680
TTGCCCAGAA	GGCTGGTTTT	GCGGACTATC	ACAGCTATGT	AGATTGCTCA	AAAATCACCG	1740
ATGAGGAATT	GATGGCCATG	GCGGAGGAGA	CAGCTATTTT	CGGACGTGTT	TCCCCTCATC	1800
AAAAGAAACT	CATCATCCAA	ACGTTGAAAA	AAGCGGGACA	TACAACGGCT	ATGACAGGGG	1860
ACGGGGTTAA	TGATATCTTG	GCCCTTCGTG	AGGCGGATTG	TTCTATCGTG	ATGGCGGAGG	1920
GGGATCCAGC	AACCCGTCAG	ATTGCCAATC	TGGTTCCTCT	GAACTCAGAC	TTTAATGATG	1980
TTCCCTGAGAT	TCTCTTCGAG	GGTCGTCGCG	TGGTCAATAA	CATTGCCCAC	ATCGCCCCGA	2040
TTTTCTTGAT	AAAGACCATC	TATTCCTTCC	TGTTAGCAGT	CATCTGTATT	GCCAGTGCTT	2100
TACTAGGTCG	GTCAGAGTGG	ATTTTGATTT	TCCCCTTCAT	TCCGATCCAG	ATTACCATGA	2160
TTGACCAGTT	TGTGGAAGGT	TTCCCACCAT	TCGTTCTGAC	TTTTGAGCGA	AATATCAAAC	2220
CTGTTGAGCA	GAATTCCTC	AGAAAATCCA	TGCTTCGTGC	CCTACCAAGC	GCTCTCATGG	2280
TCGTCTTCAG	CGTCCTGTTT	GTGAAAATGT	TTGGCGCGAG	TCAAGGTTGG	TCTGAGTTAG	2340
AAATCTCAAC	TCTACTCTAT	TATCTCTTGG	GGTCAATTGG	TTTCTTATCC	GTATTTAGAG	2400
CCTGCATGCC	ATTTACCCTA	TGGCGTGTCC	TCTTGATTGT	TTGGTCAGTA	GGAGGTTTCC	2460
TAGCCACAGC	TCTCTTCCCA	AGAATTCAAA	AACTGCTTGA	AATTTCAACC	TTAACAGAAC	2520
AAACGTTGCC	TGTTTATGGT	GTCATGATGT	TGGTCTTTAC	CGTGATTTTC	ATCCTGACCA	2580
GTCGTTACCA	AGCGAAAAAA	TAAATCAAAA	CCACCAGTGT	GAACGGGTGG	TTTGTTCCTGC	2640
GGCTATAAGC	CGCTTCTACC	GGCCAGGGCC	AAAGGCCAC	CGAAATAGCT	TCCTCGCGCA	2700
CCACTTTCCC	GAGCAGGTGC	TAAAGCACCT	TAGTTACTTC	CTCTTATTTA	TTTCGCCAGT	2760

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AAACGGATCT	ACTGACTCGA	ATAACGTGAG	CTGGTCTGCT	ACTCTGTCTT	CTTGTAATTG	2820
ATTCTGAATA	TATTCAGCTA	TCACTTTCTG	ATTACGGCCT	ACCGTATCTA	CATAATAGCC	2880
TCTACACCAA	AACTTGCGAT	TGCCATATTT	GTATTTTAAA	TTCGCATGCT	TATCAAAAAT	2940
CATCAAACCTG	CTCTTGCCCT	TTAAATAGCC	CATAAAGGAC	GAAACACTAA	GTTTCGGAGG	3000
AATACTGATA	AGCATGTGAA	TATGGTCTGA	ACAAGCATTC	GCTTCATGGA	TTATTACACC	3060
CTTACGCTCA	CATAAGTCAC	GTATGATTCT	TCCGATACTA	GCTTTGTATC	TGCCATAAAT	3120
GATTTGACGA	CGATATTTGG	GTGCAAAAAC	AATATGATAT	TTACAATTCC	ATGTGGTATG	3180
TGATAAACTT	TGATTATCCT	CTCTCATGAG	GTACCTCCTG	TATGATATGT	TGTAGTGGCG	3240
GAGAAACCAC	TTCTATCTTA	TCATTTTAGG	AGGTTCTTTT	TGTTACCACG	CTAAAAGCTC	3300
TATGGAAcCA	CTAGCATAGC	TAGTGGTTTT	CGGGAGACAA	CAAGAAAGAC	TGCAATCTGT	3360
GGATTGCAGT	TTTTTATACG	ATGGATCTAT	CGTAGATCTG	ATGTGCAAGG	CCTACGTGCC	3420
GATCATCTAT	CGGTGAACCC	AAGAGCGACC	CTCAAGCCTG	CTTGGATTGA	GGTAATAGAT	3480
TCAAATATCT	GTAGTTAGAC	TATTTGAAGT	TTGATGTAAG	AAAGAGAAAG	CGACAGATTG	3540
AAGTAATTTT	AACTCTCTTC	TATTGCTAGA	ACAAATGGTC	GGATAGGTTG	GTAGTTTGAA	3600
AATGAAGATG	CTATCTATTG	TTAAATGGAA	CATAGTGTTA	TTTATTAGAA	AATCGTTTGG	3660
TTTATTTCTT	ATCAAATACG	AAAAGCAACT	TAAATATTTT	AACTAAAATA	GATGTTATGA	3720
AGAAAAGGTA	AAATGATTTT	GGCATAGTGA	GGTCTGTTC	TATTTGATAT	CATATTTTTG	3780
ATAAAAACAA	AAATGTCCAT	TGCAAAGGAC	AAAATGCGAA	GTATATTATT	TTTTGAAAGC	3840
GATATAATGG	ATTCATAAAG	GAGGTGTATC	GTGTCTAGAA	AACAAGAACA	AATGGAAACG	3900
TTGTTGCTCC	TTTTGCGAGA	TAGTAAGGAT	TATATATCTG	CTAAAGTATT	GGGAGAAAAA	3960
TTAAATTGCT	CTGATAAAAC	GGTTTATCGC	CTTGTC AAGG	GAATCAACAA	AGATTGTCCG	4020
GTAGAAGCAT	TCATTTTATC	TGAAAAAGGC	AGAGGTTTCA	AATTAAATCC	AAGAAGTTCC	4080
CTCGTGGACG	TTGATGGGAA	TTTTACAGAG	GCTTTTGATC	CTGAAGTAAG	GCGTGAAAAA	4140
TTACTAGAAC	GTCTCTTGTT	GACTGCTCCT	AAGCCACATT	CTATTTATGA	TTTAGGAGAG	4200
GAATTCTACG	TAAGCGAGTC	AGTAGTACTA	AAAGATCGTC	AGATATTACA	AGAGAGTCTA	4260
GCAATTTATG	GGTTAGATTT	AAAAATGAGA	CAACGAAAGC	TTTTTATTGA	TGGGGATGAG	4320
GCTCAAATTC	G TTCAGCCAT	TCTAAATCTA	CTGCCAATGT	TTAATCAGTT	GGATTTAGAG	4380
CAAATTACAC	AGAATAAGGT	TCAGCCTCTT	GACGGAGAAC	TTGCTCACTT	TTGTTTGGGA	4440
TTACTGATTA	CACTTGAGAG	AGAATTGGGG	GTAAACATTC	CCTATCCATA	TAATATAAAT	4500

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ATTTTCTCTC	ACCTGTATAT	TTTTATCAGT	AGGAATCGTC	GTAGTACTAG	TATTCATGTT	4560
GTAGCACCTT	CAAAACCTAC	TATTGTTGAT	GAGAAAATTT	ACAGTGTCTG	TCAAAAAATT	4620
ATTCAAGAAA	TTGAACAATA	TTTTAGGATG	AAGGTTGATG	CAGTTGAGAT	TGACTATCTT	4680
TATCAATACG	TTGTATCTTC	GAGATTGCAA	AAACCATTTT	CTTCCGGGAA	GCTTCCTTTT	4740
TCTCAGCGAG	TTTTAGATGT	CACTCATTAC	TATTTTAGCC	GTATGTGTAT	GGACAATAGA	4800
GAGATTGAAA	CGACAGATCC	TGACTTTGTT	GACTTGGCGA	GTCATATCAG	TCCCTTACTG	4860
AGGAGATTAG	ATAATAGAGT	ACAGATTAAG	AATAGTCTTT	TATCACAAAT	TCTTTTAACC	4920
TATCCTAATC	TGGTTAAAGA	GTTAACAAC	ATTTCTAAAG	AAGTGAGTCT	AGTATTGGT	4980
TTTGCTTCCT	TGAGTCTGGA	CGAGATTGGT	TTTCTAGTCT	TATATTTTGC	ACGGTTTCAA	5040
GAAAAGCGAG	CACGTCCTCT	AAAAACAGTA	GTGATGTGTA	CATCAGGTGT	CGGAACTTCA	5100
GAGCTTTTAC	GAGCACGATT	AGAAAAGCAA	TTTTCTGAAT	TGGATATTAT	TGATGTAGTT	5160
GCTTATCATC	AATTAGATGA	GCTGATAAAT	CTATATCCAG	ATTTAGATTT	CATTGTGACG	5220
ACGGTAGCTT	TGCAGGAACC	AGCAAGTGTC	CCGTTTGTCC	TAGTTAGTGT	TTTTCTAACC	5280
GAGGGTGATA	AACAACGTCT	TCAAGCAAAA	ATTCAGGAGA	TAAACTATGA	ATAATCTTTC	5340
GCTTGTCCTT	ATGGATATAT	CTGTTCAAAA	TCGTCAAGAA	GCCTACAAAG	AATTAGCAAA	5400
TCAAATCAGC	CTTCTTGTTT	CTGAAGATAC	AGAAAAATA	GAAGAGCTTC	TATATTACCG	5460
TGAGAGACAG	GGAAGTATAG	AGGTTGCTAA	AGGTGTTCTT	CTACCACATT	GTGAAGGAAA	5520
CTTTCAACAT	CATGTCTTAG	TGATTACTAG	ATTAAAATCA	CCTATCAGAG	AATGGTCGAA	5580
GGATATCCAG	TGTGTTGACC	TTATTATCGG	TTTGGCCATT	GCAGTATCAC	AGGACAAGTC	5640
ATGTATTAAA	ACATTGATGA	GAAGACTAGC	AGATGAATCA	TTCATAAATC	AATTAAAACA	5700
GTTAACAAAA	GAAGAATTAC	GGGAGATAAT	ATATGGAAAT	CAAAGATATT	CTTAATGTGA	5760
GTCTGATCCA	GACGGATTTA	CAGATGCAGA	GCAAAGAAGA	GGTTTTTGAG	GCATTAGCTC	5820
AACTATTGGT	TGAGACGGGT	TATGTGTCTG	ATAGAGACCA	ATTTATCGAA	GGTCTTTATC	5880
AGAGAGAGGC	AGAAGGACAG	ACCGGTATTG	GGAATTATAT	TGCTATTCCC	CATAGCAAGA	5940
GTTCTGCTGT	GGAGAAGGCG	GGGGTAGTCA	TAGCTATAAA	TCACAATGAG	ATTCCTTGGG	6000
AGACCATTGA	TGGGAAAGGG	GTCAAAGTAA	TTGTACTCTT	TGCAGTTGGT	GATGATACAG	6060
AAGCTGCTAG	GGAGCATTTG	AAGACCTTAT	CACTCTTTGC	TCGAAAACCT	GGTAATGACG	6120
AAGTTGTTGC	CAAATTAGTT	CGGGCTCAGA	CATCTGATGA	TGTGATTGCA	GCTTTTTGTT	6180
AATAAGAAAA	AATTTTGGAG	GGTATCCGTA	TGAAAATTGT	TGGTGTGCA	GCTTGTAAGT	6240
TGGGAATTGC	CCACACTTAT	ATTGCACAGG	AAAAATTAGA	GAATGCCGCA	AAGGTAGCTG	6300

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GACATGTGAT	TCATGTTGAG	ACTCAGGGGA	CAATAGGGGT	AGAAAATGAA	TTGAGTCAAG	6360
AGCAGATTGA	TGCAGCGGAT	GTAGTTATTT	TAGCAGTTGA	TGTTAAGATT	TCTGGTATGG	6420
AACGCTTTGA	GGGTAAAAAG	ATTATCAAGG	TTCCAACAGA	AGTGGCAGTC	AAATCTCCCA	6480
ATAAACTGAT	TGCTAAAGCT	GTTGAGATTG	TTACGAAATA	ACTGAAAATA	TTTAAGGAGA	6540
AAATATATGT	TGAAACACTT	AAACTTAAAA	GGTCACTTAT	TGACAGCCAT	TTCTTATATG	6600
ATTCCAATTG	TTTGTGGTGC	AGGATTCTTA	GTTGCCATTG	GTTTAGCAAT	GGGGGGTGGT	6660
GTTCTTGACG	CTCTTGTAGC	AGGAAAATTC	ACTATCTGGG	ATGCTTTAGC	AACTATGGGT	6720
GGTAAAGCCC	TTGGTCTCTT	GCCAGTTGTT	ATTGCTACAG	GTTTGTCTTA	CTCGATTGCT	6780
GGTAAGCCAG	GGATTGCACC	AGGTTTTGTT	GTTGGTCTAA	TTGCCAATTC	TGTTGGTTCA	6840
GGGTTTATCG	GTGGTATCTT	GGGAGGTTAT	ATAGCTGGTT	TCTTG GTTCA	AGCGATTATT	6900
AAAAAGGTCA	AAGTACCAA	CTGGATTAAA	GGTTTAATGC	CAACCTTGAT	TATTCCTTTT	6960
GTAGCCTCTT	TGGTAAGTAG	TTTGATTATG	ATTTATATTA	TTGGAGCGCC	TATCGCAGCC	7020
TTTACCAACT	GGTTGACGAG	CTTATTACAA	AGCTTGGGAA	GTGCTTCAAA	TGTTTGATG	7080
GGGGCAGTTA	TTGGAATTCT	CAGTGCTGTT	GACTTTGGTG	GCCCCACTTA	TAAAACAGTC	7140
TATGCGTTTG	TGTTGACTTT	ACAGGCTGAA	GGTGTGAAAG	AACCATTGAC	TGCTTTACAA	7200
TTGGTGAATA	CTGCTACACC	AGTTGGATTT	GGATTGGCCT	ATTTTATCGC	GAAATTACTC	7260
AAAAAAAATA	TCTATACTCA	AGAGGAAATC	GAAACATTGA	AATCGGCTGT	TCCTATGGGG	7320
ATTGTCAATA	TTGTTGAAGG	TGTAATTC CG	ATTGTTATGA	ATAACTTGGT	TCCAGGTCTC	7380
ATTGCAACAG	GTATCGGTGG	TGCTGTTGGT	GGTGCTGTTT	CTTTGACAAT	GGGTGCTGAT	7440
TCTGCTGTGC	CATTTGGTGG	AGTGCTTATG	TTACCAACCA	TGACTCGTCC	AGTAGCTGGT	7500
ATTTGTGCCT	TGTTAGCTAA	CATTGTAGTC	ACAGGACTTG	TCTACGCGAT	TTTGAAAAAA	7560
CCAATAAAAC	ATGCAGAACC	AGTTATGACT	GTTGAAGAAG	AGATTGATTT	GTCAGATATT	7620
GAAATTTTGT	AAGAGGGTAA	CGATGTCAAG	AATTGAATTT	TCACCATCTT	TGATGACCAT	7680
GGATTTGGAC	AAATTCAAAG	AGCAGATTAC	TTTTTTTGAAT	GATAAAGTAG	CATCTTATCA	7740
TATCGATATT	ATGGATGGCC	ATTTTGTTC	CAATATTACC	TTGTCTCCTT	GGTTCATTCA	7800
AGAAGTTCAA	AAAATTAGTG	ACACACCTTT	ATCAGTTCAT	CTGATGGTCA	CAGACCCAAC	7860
CTTTTGGGTA	GATCAAGTTC	TCGATTTACA	ATGTGAGTAT	ATTTGTATTTC	ATGCTGAAGT	7920
TCTGAATGGT	CTTGCTTTTC	GTTTGATTGA	TAAAATTCAT	GATGCAGGTC	TAAAGGCTGG	7980
TGTTGTCCTT	AATCCTGAAA	CACCTGTTTC	TACAATCTTT	CCCTACATTG	ATTTACTTGA	8040

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CAAAGCAACT	ATTATGACTG	TAGATCCAGG	TTTTGCAGGA	CAACGCTTTT	TGGAGTCTAC	8100
CTTGTATAAA	ATCCAAGAAC	TCCGTCAGCT	TAGAGTTCAG	AATGGTTATC	ACTACATCAT	8160
TGAGATGGAT	GGTTCTTCGA	GTCGTAAGAC	TTTCAAACAA	ATTGATGTGG	CAGGACCAGA	8220
TATTTATGTT	ATAGGTCGCA	GTGGATTATT	TGGTTTGGAT	GACGATATTG	CCAAAGCCTG	8280
GGATATCTGT	TCTAGAGATT	ACGAAGAAAT	GACCGGAAAA	ACAATGCCAA	TCAAATAATG	8340
GTTTGAGAAG	AAATTTATTA	GTTAGGAGGA	ATATATGTCA	CTACAATCAG	TTAACGCCAT	8400
TCGTTTTCTT	GGCGTAGATG	CTATTAACAA	ATCTAATTCT	GGTCACCCGG	GAATTGTCAT	8460
GGGTGCTGCG	CCAATGGCTT	ATAGCCTATT	TACAAAGCAC	CTTAGAATTA	CACCTGAGCA	8520
GCCAAACTGG	ATTAACCGAG	ATCGCTTTAT	CTTGTCTGCG	GGTCATGGAT	CAATGCTACT	8580
GTATGCTCTC	TTGCATTTAA	CAGGGTATAA	GGATGTATCC	ATGGACGAGA	TTAAAAATTT	8640
CCGGCAATGG	GGATCTAAGA	CACCTGGTCA	TCCTGAAGTG	ACGCATACGT	CTGGTGTGGA	8700
TGCGACATCT	GGTCCGCTTG	GTCAGGGGAT	TTCTACTGCC	GTTGGTTTCG	CCCAAGCAGA	8760
GCGTTTTTTA	GCTGCTAAGT	ACAACAAAGA	TGGTTTCCCT	ATTTTTGACC	ATTATACTTA	8820
TGTTATCGCT	GGAGACGGTG	ACTTCATGGA	AGGAGTGTCT	GCGGAGGCGG	CTTCTTATGC	8880
AGGTCATCAA	GCTTTAGATA	AGCTTATCGT	CCTCTACGAC	TCCAACGACA	TCTGCTTGGA	8940
TGGTGAGACC	AAAGATACTT	TCTCTGAAAA	TGTTTCGCGTC	CGTTACGATG	CTTATGGTTG	9000
GCATACAGTT	CTGGTAGAAG	ATGGAACAGA	TTTAGCAGCA	ATTTCTACAG	CAATTGAGAC	9060
GGCCAAGTTT	TCTGGTAAAC	CGAGTTTGAT	TGAAGTGAAA	ACGGTAATTG	GTTACGGCTC	9120
ACCCAATAAA	AGTGGTACAA	ATGCTGTTCA	TGGTGCACCA	CTAGGAGCAG	AAGAAACAGG	9180
AGCAACTCGT	AAGTTTTTGG	GATGGGATTA	CGATCCATTT	GAAGTACCAG	AGGAAGTATA	9240
TTCTGATTTT	AAGACAAATG	TAGCGGATCG	TGGTCAGGAG	GCATACGATG	CTTGGGCTAG	9300
TTTGGTGTCT	GATTACAAGG	TTGCTTATCC	CGAAGTTGCT	AGTGAGATTG	ACGCTATTGT	9360
AGCTGGAAAA	TCCCCTGTAA	CCATTACTGA	AAAAGACTTC	CCTGTCTATG	AGAATGGCTT	9420
CTCTCAAGCA	ACTCGTAATT	CGTCCCAAGA	TGCTATTAAT	ACAGCAGCAG	TTTTACCAAC	9480
CTTCTTAGGT	GGATCGGCAG	ACTTAGCTCA	CTCTAACATG	ACCTACATCA	AGGCAGATGG	9540
CTTACAAGAT	AAATATAATC	CATTAAACCG	CAATATTCAG	TTTGGGGTAC	GTGAATTTGC	9600
CATGGGAACA	ATCCTCAATG	GAATGGCTCT	TCATGGTGGT	TTACGAGTTT	ATGGCGGAAC	9660
CTTCTTTGTT	TTCTCTGACT	ACGTCAAAGC	TGCTATTCCG	CTATCAGCCA	TTCAGGAGTT	9720
GCCTGTAAC	TATGTCTTTA	CCCATGATTC	AATTGCCGTT	GGTGAAGATG	GTCCAACTCA	9780
TGAACCAGTT	GAACATTTGG	CAGGTTTACG	CTCAATGCCA	AACTTGACTG	TTATCCGTCC	9840

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AGCGGATGCC	CGTGAAACTC	AAGCGGCTTG	GCATCATGCC	TTGACCAGTA	CCACCACTCC	9900
AACTGTCATT	GTCTTAACCC	GTCAAAACTT	GGTAGTTGAA	GAAGGGACAG	ACTTTGGTAA	9960
GGTCGCTAAA	GGAGCCTACG	TCGTGTATGA	TACCCCGGGA	TTTGATACTA	TTATCATTGC	10020
TACAGGATCT	GAGGTCAATC	TAGCTATCAA	AGCTGCTAAG	GAATTGGTTT	TACAAGGTGG	10080
TAAAGTACGT	GTGGTATCTA	TGCCCTCAAC	CGAACTATTT	GATGCTCAAG	ATGCTACCTA	10140
CAAGGAAGAC	ATTTTACCAT	CTAAGACTCG	TCGTCTGTG	GCCATTGAAA	TGGCAGCGAC	10200
CCAAAGTTGG	TACAAGTATG	TTGGTTTGGA	TGGCGCGGTC	ATCGGTATTG	ACATCTTCGG	10260
TGCGTCTGCC	CCAGCTCAGA	CTGTGATTGA	TAATTATGGA	TTTACGGTAG	AGAATATCGT	10320
TGCTCAAGTT	AAGTCCCTAT	AGAAACCAAT	TACAATGAAG	ATACAGCTGT	TGTCAGACTA	10380
GCAGATGTAG	TGATAGACAC	TAATCAGATG	ATTGGTTATT	TAAAACTGT	AATGAAAATG	10440
TAATAATTTA	TCTACGAAAG	TTATAGTAGA	TAGTATACAC	AATAGAGTAT	ACCCTGAAAC	10500
GGTTGCGAAG	TACGCTAATC	ACTTTGCTAC	TGATCTAGAT	AGTTTCTTTA	ATCAATAAAC	10560
ACAGCATCCA	CAGATTGACT	TAGGATATTG	TAAGTTTTTT	GAAAGCTAGA	GAGAAGGTCT	10620
CTAAAATTAA	AAAACGCATA	GTATAGGATG	TTGAAATGAT	GAAGTGCACC	CCAAAAGTTA	10680
GACAGAAAAA	AATCTAACTT	TTGGGGTGTT	TTTATTATGA	AATTAAGTTA	TGATGATAAA	10740
GTTCAAGTTCT	ATGAACTTAG	AAAACAAGGA	TATATCTTAG	AGAAGCTTTC	AAATAAATTT	10800
GGGATAAATA	ATTCTAATCT	TAGGTACATG	ATTAAATTGA	TTGATCGTTA	CGGAATAGAG	10860
TTTCGTCAAAA	AAGGGAAAAA	TCGTTACTAT	TCTCCTGATT	TAAAACAAGA	AATGATTCAT	10920
AAAGTCTGAC	ATGAAGGCTG	GACTAAAGAT	AGAGTTTCTC	TTGAATACGG	TCTCCCAAGT	10980
CGTACGATAC	TTCTTAACTG	GCTAGCACAA	TACAGGAAAA	ACGGGTATAC	TATTGTTGAG	11040
AAAACAAAAG	GGAGAGTACC	TGAGAGCGGA	GAATGCCATC	CTAAAAAAGT	TAAGAGAACT	11100
CCGATTGAAG	GAGGAAAAAG	AGAAATAAGA	AAGACAGAAA	TTGTTCAAGA	ATTAATGACT	11160
GAGTTTTTCGT	TAGATCTTCT	TCTAAAAGCC	ATTAACTAG	CTCGTTGGAC	CTACTACTAT	11220
CACTTGAAAC	AGCTAGATAA	ACCAGATAAG	GACCAAGAGC	TTAAAGCTGA	AATTCAATCC	11280
ATCTTTATCG	AACACAAGGG	AGATTATGCT	TATCGCCGGG	TTCATTTAGA	ACTAAGAAAT	11340
CGTGCTTATC	TGGTAAATCA	TAAAAGAGTT	CAAGGCTTGA	TGAAAGTACT	CAATTTACAA	11400
GCTAGAATGC	GACAGnAACG	AAAATATTCT	TCTCATAAAG	GAG		11443

(2) INFORMATION FOR SEQ ID NO: 50:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 5338 base pairs

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(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 50:

CCAATTACAT TATATTATCA AAATCGTCGA AACTGGCTCC ATGAATGAGG CAGCCAAGCA	60
ACTCTTTATC ACTCAGCCAA GTCTCTCCAA TGCAGTGCGA GATTTGGAAA ATGAAATGGG	120
CATTGAGATC TTTATCCGCA ATCCCAAGGG AATCACCTTG ACCCGTGATG GCATGGAGTT	180
TCTCTCTTAT GCCCGTCAGG TTGTCGAGCA GACCCAGCTT CTGGAGGAAC GCTATAAAAA	240
TCCTGTCGCC CACCGCGAAC TCTTTAGCGT TTCGTCTCAA CACTATGCCT TTGTGGTCAA	300
TGCCTTTGTC TCTTTGCTCA AGAAAAGCGA TATGGAGAAA TACGAACTCT TCCTTCGTGA	360
AACTCGGACT TGGGAGATTA TCGACGACGT CAAGAACTTC CGCAGTGAGG TCGGGGTCCCT	420
CTTCTTAAAC AGTTACAACC GTGATGTTTT AACCAAGATG CTGGATGACA ATCACCTGCT	480
AGCCCACCAT CTCTTCACAG CGCAACCGCA TATCTTTGTC AGCAAGACCA ACCCTCTGGC	540
AAAGAAAGAC AAGGTGAAAC TGTCTGATTT GGAGAATTTT CCTTACCTCA GCTATGACCA	600
AGGGACGCAC AACTCCTTCT ACTTTTCAGA AGAGATTCTT TCTCAAGAAC ACCACAAGAA	660
ATCCATTGTG GTCAGTGACC GTGCCACCCT CTTTAATCTC TTGATTGGTT TGGATGGTTA	720
TACCATTGCG ACAGGGATTT TGAACAGCAA CCTAAACGGA GACAATATCG TTTCTATCCC	780
ACTGGATATT GATGACCCGA TCGAGCTGGT CTATATCCAG CATGAGAAAA CCAGCCTATC	840
TAAGATGGGC GAACGCTTTA TAGACTATCT CCTAGAAGAA GTTCAGTTTG ATAGTTGAGA	900
AATGATAAGA ACCAATATGT AGGCTAGCAA CAACCTGCAC ATTGGTTCTT TTTACTTATA	960
ATTAAAAGTT TCCCCTGCCA ACTTATCAGC TAGCTTGGGA AAGAGAGTAT AAAACTTATG	1020
GGCTAGGTTT AACAAAATCG GGAGATTGAG TTCTCGTTTG TTTTTCCTA TAATCTTGAC	1080
AATCTTTTTA GCCACTGCAT CTGGTTCTAG CAGGAAGCGA TCAACCGATT TAAGATAAGT	1140
TCCATCTGGG TCGGCTTGGT CGAAAAATCC TGTACGGATT GGTCTGGAT TGACTGTTGT	1200
CACATAGACT CCATAGGGCA TAAGTTCGAG TCGCAGAGCA TTTGAAAAAC CAATAGCCGC	1260
AAACTTGGTC GCTGAGTAAA GACTAGACTT GCCAGTAGCT ATTAGACCTG CCATGCTGAC	1320
GATGTTGATG ATATGCCCTT TGCTGCTTTC CTTCATACGA GCCGCAAGGT GACGAGACAG	1380
ATTCATCAGG GCAAAGGTAT TGACCTCAAA CATCTGGTGA ATATCTTTAT CAGCAATCTG	1440
GTCAAATCCC TCAAAAATCC CGTAACCAGC GTTGTTAATC AAGACATCAA TCTTGCCATA	1500
GCGGAGATAA AGATCAGTTA CCAGAGCTTC TAGGGCTGAA TCGTCGGTAA TATCAATTTT	1560

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AATCAATTCT	GCATGGGAAT	AATTTCCGTA	GAGTTGGGCT	AATTTTTTCCT	TATTTCTACC	1620
AAGCAAGATG	AGTTGGTCAT	TGGGCAGGAG	TTTGACCATT	TCTTGAGCTA	GACCACCGCT	1680
AGCTCCGGTA	ATGAGAATAG	TAGGCATACT	TATCCTTTCT	GTGACTGCTA	GATTTCCACT	1740
TCTTCCAAGT	CTTTGACCAC	ATGGACATTT	TCAAAAATTG	TGGCAGCGTC	TTTCTTGAGT	1800
TTGCTAATAT	CTTTTGAGAG	GAAACGGGCA	CTGATATGGT	TGAGTAGGAG	GCGTTTGGCA	1860
CCTGCTTCTA	CCGCTACTTG	TGCAGCTTGC	ATATTAGTTG	AGTGACCATG	GTTACGAGCA	1920
ATTTTTTCAT	CACCCTTGCC	ATAAGTGGAC	TCATGAACTA	GGACATCTGC	ATTGACAGCC	1980
AGACGCACAC	TGGCACCCGT	TTTTCGAGTG	TCTCCTAAAA	TAGTGATAAT	CTTACCTGGA	2040
CGTGGCGCTG	AGATATAGTC	TGCTGCCTTG	ATTTCAAGTTC	CGTCTTCCAA	AACAAGATCC	2100
TGGCCGTTTT	TGATTTTACC	AAAAAGCGGG	CCGAACGGAA	CACCAGCAGC	CTTGAGTTTT	2160
TCAGCATCCA	GCGTCCCTTC	TAGATCCTTT	TGCATGACAC	GATAGCCAAC	ACAGAAAATA	2220
GTGTGGTCCA	GCTCCTCTGC	ATACACAGTG	AATTTATCGG	TTTCAAGAAT	TTTACCCAGA	2280
GAATCTTGGT	CAAACATCATG	GAAATGAATG	CGGTAGGGCA	GACGAGAACC	TGACACACGA	2340
AGGCTGGTTA	AGACAAATGA	CTTGATTCCCT	TGAGGTCCGT	AGATTTCCAA	ATCTGTCTGC	2400
TCTTCATTGG	CCTGAAAGGC	ACGGCTAGAA	AGGAAACCTG	GCAAACCAAA	AATGTGGTCT	2460
CCATGCAGAT	GGGTAATAAA	GATTTTGCTG	ACCTTACGTG	GTCGAATTGT	GGTTTCCAGA	2520
ATGCGATTTT	GCGTACCTTC	TCCACAGTCA	AAGAGCCAAA	CTTCGTTAAT	CTCATCCAAA	2580
AGTTTCAGGG	CGAGACTTGA	AACGTTGCGG	GCTTTAGAGG	GCTGACCAGC	CCCCGTTCCT	2640
AAAAATTGAA	TATCCATTCTG	ATACCTTCTA	ATTAATCAAT	ATATAACATG	GCTGTGCGGT	2700
TTTCCGATCG	GAAATAGCGT	TTGCCAGAAA	AAGCAGCAGC	TTCTTGCAAT	AAATCCTCTT	2760
GGCTGTAGCC	TTTGAGACGT	TTTCGACCAT	CAGCCAATCT	TTCCAAATCA	GTCAAAGCTG	2820
TGAGACTTTC	TAGGCTGATA	ACTTCCTCGT	CCTCGACAGG	CTTCATGTAA	ATCTTACCAG	2880
ACTCTTCAAA	GACTAATTGA	TGGGGGAAAA	TTTGCGCAAT	TTCAAAGAGC	AAGTCATCCG	2940
AGATTTTCTC	CTCATTTTCA	AAGAAAATCC	GACCAAGGCC	GTCACCTCTCA	TAACAAAAC	3000
CAAAGGATTT	ACCAGACAGA	TTAAGCCGAA	TAAAAGGCTT	ATTTTCTAGG	GTGAAACTTG	3060
GCTCAGTATT	GTAAAGATTG	AGTTCCTGAC	TGAGTTCTGC	AAAATAATCC	GTCGCAGCCT	3120
GAGGACTCTT	TTTCTGATAG	AGTTCCTGCA	AGTAGGCATT	AACAACACTT	GGCGGAGGTG	3180
TAATAAGTGT	TAACTGCTCC	TGATCTGTTT	TACCAGCTAG	AAGCTGATCC	AGATAGACCT	3240
TGTCCAGACT	TGTATAACCT	CCATACTTTA	GAGCCAAAGT	TTTAATATCA	GTCATAAAAT	3300

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TCTTCTAACC	TCCATTTATT	TTTCTCGGAA	ATGTAGCCTG	TAATCACTTC	GCCGTCTTCC	3360
TGATAATCAC	GTTCTTCCAG	AATTGCAACA	CTCTCTAAAT	CATGAATCTT	GTAGGACTTT	3420
GAAAAAGGCA	CTCGCAGGGT	AAATGCTTCA	AAAATTTCCCT	TAATCTTATC	TAGCAATAAT	3480
GCTTGCAAGT	TTTCACGACT	GTCCTCAGAC	TTGGCAGAAA	TGAGGGTATA	TGGCGTTTGG	3540
GTAGGCGTGA	AATCCTCCAC	CAAATCCGCT	TTATTATAAA	GCGTCAAGTG	AGGAATATCT	3600
TCCATGTCCA	GGTCTTTCAT	GATGGAGAGA	ACCGTTTTTTT	CATGCTCCTC	GTGGTAAGGA	3660
TTGCTAGCAT	CGATAACATG	AACCAGAAGG	TCCACATGCT	TGCTTTCTTC	CAAGGTTGAC	3720
TTGAAACTGG	ACACCAACTC	TGTCGGCAAA	TCTTGGATAA	AGCCAACGGT	ATCTGTCAAA	3780
GTTACTTGGA	GATTGCCTCC	CAGATGAATA	CTCTTGGTTG	TCGCATCCAG	AGTCGCAAAG	3840
AGCTCATCTG	CTTCATACTG	GGTCTTACTG	GTCAAGATGT	TCATGATAGT	TGATTTCCCA	3900
GCATTAGTAT	AACCAATCAA	ACCAATCTTA	AAAGTGCTAG	ACTCCAAACG	TTTTTCTCTG	3960
ACAGTCGCAC	GATTTTTCTC	AACCACCTTG	AGCTGGCGCT	CGATATCCGT	GATTTGATTG	4020
CGAACGCTAC	GACGGTTCAG	CTCCAGCTGG	CTTTCACCAG	GACCACGGGA	ACCAATTCCC	4080
CCTgCCTGAC	GGCTGAGCAT	AATCCCCTGA	CCAACCAAGC	GAGGCAAAAG	GTATTTGAGT	4140
TGGGCTAGGT	GGACTTGAG	CTTCCCTTCA	TGGCTTCGAG	CCCGCATGGC	AAAGATATCC	4200
AAAATCAACT	GCATACGGTC	AATGACCTTA	ACACCGAGAA	CTTCCTCTAG	ATTGACATTC	4260
TGCCTTGGGG	TCAGACGATT	GTTGACGATG	ACAGTAGTGA	TTTCTTCTGC	ATCCACCATA	4320
AGCGCAATCT	CTTCCAACCT	ACCAGAGCCG	ACGAAGGTCT	TGGAATCATA	TTTTTCACGT	4380
TTTTGTCTGT	AGCTATCTAC	AACGACTGCC	CCTGCCGTTT	TCGCTAAACT	AGCCAATTCT	4440
TCCATGGAGA	GGTCAAAACT	GTCCATACCC	TGCAATTCCA	CACCAATCAG	CAGGACTCGC	4500
TCCTCTTTTT	TCTCCGTTTC	AATCATCTAA	AAACTCCTCT	ATCTGGCTTA	AAATGCGGTC	4560
TTGTACACCA	GATTCTCCAA	TCTGATAAAA	GGTGACCTGC	ATGCGATTAC	GGAACCAGGT	4620
CAGCTGACGC	TTGGCAAAAC	GACGAGTCGC	CTGTTTAAGA	CTCTCACTAG	CTTCCTCCAA	4680
GGTCTGCTCT	CCACGGAAAT	AAGGAAAGAG	TTCTTTATAG	CCAATTCCTT	TAGCAGCCTG	4740
TACATTAGGG	GAATGGTCAA	ACAGCCACTT	GGCCTCATCC	AAAAGCCCAG	CCTCAAACAT	4800
CAAATCCACT	CGGTGGTTGA	TACGCTCATA	AAGTTGACTA	CGTTCATCAT	CCAAGCAGAT	4860
AATCAGCGGT	TCATACAAGG	TCTCTTGATT	TTCCAAATCC	TGACCAAAAT	GGGCAATTTT	4920
TAAGGCACGC	ATAGCACGAC	GACGATTAAA	CTGGGGAATC	TCAAGGCCTG	CTTGATCCAC	4980
CAAATGGGCT	AATTCCTCAT	CTGAATATGG	CTCCAAACTA	GCTCGATAAG	CTAAAATCTC	5040
CTCATGAGGA	GTCTCCCCAC	CTAGGTGGTA	ACCTTCTAGC	AAGCTCTGGA	TATAAAGTCC	5100

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AGTCCCACCG GCGATAATGG CTAGCTTGCC ACGGTTGTGA ATACCCTCAA TAGTCATCTT	5160
AGCTTCTGAA ACAAATCAA AAGCCGAGTA AGACTCGGTT ATCTCTCTAA CATCGATTAA	5220
ATGATGAGGA ACAGCTGCCT GCTCTTCTGG ACTAGCCTTG GCCGTCCCAA TATCAAGTCC	5280
TCGATAGACT TGCTGGCTAT CTCCACTAAC CACTTCGCCA TTAAAACGCT TTGCGGGG	5338

(2) INFORMATION FOR SEQ ID NO: 51:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 19446 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 51:

CGGAAACCCA TCTAGTCTCC ATCGTTTGGG AGACCAAGCA ACACGAATCT TAGATGCTTC	60
TCGCCAACAG ATTGCAGATT TAATCGGTAA GAAAAGCGAT GAAATCTTCT TTACCTCGGG	120
TGGAACAGAA GGGGATAACT GGCTTATCAA GGGTGTGGCC TTTGAAAAAG CTCAGTTTGG	180
CAAGCACATC ATTGTTTCAG CCATTGAACA TCCAGCAGTC AAAGAGTCAG CCCTCTGGTT	240
GAAAAGTCAA GGATTTGAAG TGGATTTTGC TCCAGTTGAT AAGAAAGGCT TGGTCGATGT	300
TGAGGCGTTA CAGGTTTGAT ACGGCATGAT ACAATCCTCG TTTCCATCAT GGCTGTGAAC	360
AATGAAATCG GCTCTATCCA ACCTATTGAG GCTATTTTCA AATTCTTGGC AGACAAGCCG	420
ACTATTTTCT TCCACGTTGA TGCGGTTTCA GCGCTTGCCA AAATTCCGAC TGAAAAGTAT	480
CTGACAGAAC GGGTGGATTG CGCGACTTTC TCTAGTCACA AGTTCCACGG GGTTCGAGGT	540
GTTGGCTTTG TCTATATCAA ATCTGGCAAG AAGATTACAC CTCTTCTTAC AGGTGGTGGC	600
CAGGAGCGAG ATTATCGTTC GACAACTGAA AATGTGGCAG GGATTGCAGC GACAGCCAAG	660
GCCCTCCGTT TGTCTATGGA AAAGCTAGAT ATCTTTAGGA GCAAGACTGG GCAGATGAAG	720
GCAGTGATTC GCCAAGCTCT TCTGAACTAT CCGGATATTT TTGTCTTTTC AGATGAGGAA	780
AACTTTGCAC CTCATATTCT GACTTTTGGA ATCAAAGGTG TTCGAGGTGA AGTCATCGTT	840
CACGCCTTTG AAGACTATGA TATTTTCATC TCAACAACCT CAGCTTGTTT ATCTAAGGCA	900
GGAAAACCAG CCGGTACCTT GATTGCCATG GGAGTGGACA AAGATAAGGC CAAGTCAGCT	960
GTGCGTCTTA GCCTAGACTT GGAAAATGAT ATGAGTCAGG TCGAGCAGTT TTTGACCAAG	1020
TTAAAATTGA TTTACAATCA AACTAGAAAA GTAAGATAGG AGCATTCATG CAGTATTCAG	1080
AAATTATGAT TCGCTACGGA GAGTTGTCAA CCAAGGGTAA AAACCGTATG CGTTTCATCA	1140

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ATAAACTTCG	TAATAATATT	TCGGACGTTT	TGTCTATCTA	TACCCAAGTT	AAGGTAACAG	1200
CAGATCGCGA	CCGTGCCCCAC	GCTTACCTCA	ATGGAGCTGA	TTACACAGCA	GTTGCAGAAT	1260
CTCTCAAACA	AGTTTTTGGA	ATTCAAAAC	TTTCTCCTGT	TTATAAGGTT	GAAAAATCTG	1320
TAGAAGTTTT	GAAGTCTTCT	GTCCAAGAGA	TTATGCGGGA	CATCTACAAG	GAAGGTATGA	1380
CCTTTAAGAT	TTCTAGCAAG	CGTAGCGACC	ACAACTTTGA	ACTTGATAGT	CGTGAACCTCA	1440
ACCAAACACT	TGGAGGGGCT	GTATTCGAAG	CCATTCCAAA	TGTGCAAGTT	CAAATGAAAA	1500
GTCCTGACAT	CAATCTTCAG	GTGGAGATTC	GTGAAGAAGC	AGCCTATCTT	TCTTATGAAA	1560
CCATTCGTGG	GGCTGGTGGT	TTGCCAGTTG	GAACCTCAGG	TAAAGGGATG	CTCATGTTGT	1620
CAGGAGGGAT	TGACTCACCT	GTAGCAGGTT	ATCTTGCTCT	TAAGCGTGGG	GTGGATATCG	1680
AGGCAGTTCA	CTTTGCTAGT	CCACCATATA	CTAGTCCTGG	TGCCCTCAAG	AAAGCGCAGG	1740
ACTTGACCCG	TAAATTGACC	AAGTTTGCGG	GAAATATCCA	GTTTATAGAG	GTGCCTTTCA	1800
CAGAGATTCA	AGAGGAAATC	AAAGCCAAAG	CGCCAGAAGC	TTATTTGATG	ACTCTAACTC	1860
GTCGCTTTAT	GATGCGGATT	ACTGACCGTA	TTCGTGAGGT	ACGAAATGGT	TTGGTTATCA	1920
TCAATGGGGA	AAGTCTAGGT	CAAGTAGCCA	GCCAAACCTT	TGAAAGTATG	AAGGCTATCA	1980
ATGCTGTTAC	CAACACTCCC	ATCATTCGTC	CTGTGGTTAC	CATGGACAAG	TTGGAAATCA	2040
TTGACATCGC	CCAGGAAATC	GATACCTTTG	ACATTTCAAT	CCAACCGTTT	GAAGACTGTT	2100
GTACCATTTT	TGCACCAGAT	CGTCCAAAAA	CAAATCCTAA	AATTAAGAAT	GCGGAGCAGT	2160
ACGAAGCGCG	TATGGATGTT	GAAGGCTTGG	TTGAGCGAGC	AGTGGCTGGA	ATCATGATTA	2220
CTGAAATCAC	ACCTCAAGCC	GAAAAAGATG	AAGTTGATGA	CTTGATTGAC	AATCTGCTCT	2280
AATTCAGAAA	ATCCAAAAGA	ATAGCGAAAA	TCAGTAAAAA	AAGTTAGTTT	TTTCTCTAAA	2340
AACAGGTAAA	AAACTAACTT	TTTTTATTTT	TATGATATAA	TGATATAAAA	TTTTGAATAT	2400
AGAGAGTTTT	CTGACAATGA	ATCAATCCTA	CTTTTATCTA	AAAATGAAAG	AACACAAACT	2460
CAAGGTTCCCT	TATACAGGTA	AGGAGCGCCG	TGTACGTATT	CTTCTTCCTA	AAGATTATGA	2520
GAAAGATACA	GACCGTTCCT	ATCCTGTTGT	ATACTTTCAT	GACGGGCAAA	ATGTTTTTAA	2580
TAGCAAAGAG	TCTTTCATTG	GACATTCATG	GAAGATTATC	CCAGCTATCA	AACGAAATCC	2640
GGATATCAGT	CGCATGATTG	TCGTTGCTAT	TGACAATGAT	GGTATGGGGC	GGATGAATGA	2700
GTATGCGGCT	TGGAAGTTCC	AAGAATCTCC	TATCCCAGGG	CAGCAGTTTG	GTGGTAAGGG	2760
TGTGGAGTAT	GCTGAGTTTG	TCATGGAGGT	GGTCAAGCCT	TTTATCGATG	AGACCTATCG	2820
TACAAAAGCA	GACTGCCAGC	ATACGGCTAT	GATTGGTTCC	TCACTAGGAG	GCAATATTAC	2880
CCAGTTTATC	GGTTTGGAAT	ACCAAGACCA	AATTGGTTGC	TTGGGCGTTT	TTTCATCTGC	2940

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AAACTGGCTC	CACCAAGAAG	CCTTTAACCG	CTATTTTCGAG	TGCCAGAAAC	TATCGCCTGA	3000
CCAGCGCATC	TTCATCTATG	TAGGAACAGA	AGAAGCAGAT	GATACAGACA	AGACCTTGAT	3060
GGATGGCAAT	ATCAAACAAG	CCTATATCGA	CTCGTCGCTT	TGCTATTACC	ATGATTTGAT	3120
AGCAGGGGGA	GTACATCTGG	ATAATCTTGT	GCTAAAAGTT	CAGTCTGGTG	CCATCCATAG	3180
TGAAATCCCT	TGGTCAGAAA	ATCTACCAGA	TTGTCTGAGA	TTTTTTGCAG	AAAAATGGTA	3240
AGTTAAGAAA	GGAAAAAACG	AAATGCATAT	TGAACATCTT	AGCCACTGGA	GTGGTCATCT	3300
TAACCGTGAA	ATGTACCTTA	ACCGTTATGG	ACATGGTGGG	ATTCCAGTTG	TGGTCTTTGC	3360
TTCATCAGGT	GGTAGTCACA	ACGAATACTA	TGATTTTGGC	ATGATTGATG	CCTGTGCTTC	3420
CTTTATCGAG	GAAGGCCTTG	TCCAGTTCTT	TACCCTATCT	AGTTTGGATA	GTGAGAGCTG	3480
GTTGGCTACT	TGGAAAAATG	CTCATGACCA	AGCGGAAATG	CACCGTGCCT	ACGAACGTTA	3540
TGTGATTGAG	GAGGCCATTC	TTTTATCAAG	CACAAGACAG	GTTGGTTTGA	TGGCATGATG	3600
ACGACAGGTT	GCTCTATGGG	AGCCTATCAT	GCACTCAATT	TCTTCCTCCA	GCATCCAGAT	3660
GTCTTTACCA	AAGTGATTGC	TCTCAGTGGT	GTTTACGACG	CACGTTTCTT	TGTCGGTGAT	3720
TACTACAACG	ATGATGCTAT	TTACCAAAAC	TCGCCAGTAG	ATTATATTTG	GAACCAAAAC	3780
GACGGCTGGT	TTATTGACCG	TTACCGTCAG	GCAGAGATTG	TGCTGTGTAC	GGGGCTTGGA	3840
GCCTGGGAAC	AAGATGGTTT	GCCATCCTTT	TACAAGCTCA	AAGAAGCCTT	TGACAAGAAA	3900
CAAATTCCAG	CCTGGTTTGC	TGAATGGGGA	CATGATGTCG	CCCATGACTG	GGAATGGTGG	3960
CGTAAACAAA	TGCCTTATTT	CCTCGGTAAT	CTCTATTTAT	AAAAGGAGTT	ACCTATGAAT	4020
TACCTTGTTA	TTTCTCCCTA	CTATCCACAA	AACTTTCAAC	AGTTTACCAT	CGAACTAGCT	4080
AATAAAGGCA	TCACAGTCTT	GGGAATTGGT	CAAGAGTCTT	ACGAGCAATT	GGATGAGCCC	4140
TTGCGCAATA	GCTTGACCGA	GTATTTTCGT	GTTGATAATC	TTGAGAACAT	AGATGAAGTC	4200
AAACGTGCAG	TTGCTTTTCT	CTTTTATAAA	CATGGTCCAA	TTGGCCGCAT	CGAGTCTCAC	4260
AATGAATACT	GGCTTGAGCT	AGACGCAACA	CTCAGAGAAC	AATTCAATGT	TTTTGGTGCC	4320
AAACCAGAGG	ATCTCAAAAA	GACGAAATAT	AAGTCTGAAA	TGAAGAAACT	TTTCAAAAAA	4380
GCAGGTGTTT	CTGTGGTACC	TGGAGCTGTT	ATCAAGACGG	AAGCAGATGT	TGATCAAGCA	4440
GTGAAAGAAA	TCGGTCTTCC	AATGATTGCC	AAACCTGATA	ATGGAGTGGG	AGCAGCCGCA	4500
ACCTTTAAAC	TTGAGACAGA	AGACGATATC	AATCACTTCA	AGCAAGAATG	GGACCATTCA	4560
ACCCTTTATT	TCTTTGAAAA	ATTTGTCACT	TCCAGCGAAA	TCTGTACCTT	TGACGGGCTC	4620
GTGGACAAGG	ATGGAAAGAT	TGTCTTCTCA	ACAACCTTTG	ACTACGCCTA	TACACCGCTT	4680

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GACCTCATGA	TTTATAAGAT	GGACAATTCT	TATTATGTGC	TCAAGGATAT	GGATCCTAAA	4740
CTGCGCAAGT	ATGGGGAAGC	AATTGTCAAA	GAATTTGGTA	TGAAAGAACG	GTTTTTCCAT	4800
ATTGAGTTCT	TCCGTGAGGG	GGACGATTAT	ATTACCATCG	AGTACAATAA	CCGCCCTGCA	4860
GGTGGTTTTA	CCATTGATGT	TTATAACTTT	GCTCATTCCT	TGGACCTTTA	TCGTGGCTAT	4920
GCAGCTATTG	TCGCAGGAGA	GGAGTTCCCG	GCGTCAGACT	TTGAAACTCA	GTATTGTTTG	4980
GCTACTTCTC	GCCGTGCAAA	TGCTCACTAT	GTTTATTCAG	AAGAGGATTT	GCTTGCCAAA	5040
TATAGCCAGC	AGTTCAAGGT	TAAAAAAGTC	ATGCCAGCTG	CCTTCGCGGA	ACTTCAAGGA	5100
GATTACCTGT	ATATGCTGAC	CACTCCGAGT	CGACAAGAAA	TGGAGCAGAT	GATTGCAGAT	5160
TTCGGACAAC	GTCAAGAATA	AGAACTATCG	GATTAAGGAA	ATTAACTCCC	TTAATCCTTT	5220
TGTTTTGTCT	GATAAAAAAT	AAGAGCATCC	CAACAAGGTA	GCTATCATAA	AACTTGTTTCG	5280
ATAACTATTT	GAAGCAGGAT	TAGGTGGTCA	GAAATTAAAT	TTTAATATTT	CAATTGAGTC	5340
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ATATAGTTTT	CAAGATACCA	AACAAGTCTA	TTAATATTCA	ATGAAAATCA	AAGAGCAAAC	5460
TAGGAAGCTA	GCCGCAGGTT	TCTCAAAACA	CTGTTTTGAG	GTTGTGGATA	GAAGTGACAG	5520
AGTCAGTATC	ATATACTACG	GCAAGGTGAA	GCTGACGTGG	TTTGAAGAGA	TTTTTCGAAGA	5580
GTATAAAATA	TTCAGGTGAC	GCATAGATAT	AGTTAATTGA	AGCTTTGTTT	GAAATCTGAT	5640
AAAATAATGA	TATTACTAAG	TTTTAAAAAC	TAAAGAAAAG	GGAAGATATG	ATTACAGGCG	5700
AATTAAAAAA	TAAAATCGAT	CAGCTGTGGG	AAATTCTTTG	GACAGAAGGA	AACGCAAATC	5760
CTTTAACAAA	TATTGAACAG	TTGACTTATC	TCTTATTTAT	GAAAGATTTG	GATAGTGTCG	5820
AGCTTGGACG	TGAAAGTGAT	GCTGAATTTT	TAGGGATTCC	TTATGAGGGA	GTTTTTCCAA	5880
AAGATAAACC	TGAATACCGT	TGGTCAACTT	TTAAAAATAT	AGGAGATGCT	CAGGAAGTTT	5940
ATCGTTTAAT	GACTCAGGAG	ATTTTTCCGT	TTATTAAAAA	TCTCAAGGGG	GATACAGATG	6000
ATACAGCCTT	TTCACGATAT	ATGCGAGAAG	CTATTTTTCA	AATAAATAAA	CCTGCTACGC	6060
TTCAAAAGGC	AATTTCTATC	TTAGATGTTT	TTCCAAC TAG	GGGATTAGAT	G TAGATTTTG	6120
ATAATGACAA	ACAAAGTATT	ACTGATATCG	GAGATATCTA	TGAATATCTG	TTATCAAAAT	6180
TGTCGACCGC	AGGTAAAAAT	GGACAGTTCC	GTACACCTCG	TCACATCATC	GATATGATGG	6240
TTGAGTTGAT	GCAACCGACT	ATCAAAGATA	TCATCTCAGA	TCCCGCTATG	GGTTCTGCTG	6300
GCTTCTTAGT	ATCTGCTAGC	CGTTACTTAA	AGCGTAAGAA	AGATGAATGG	GAAACCAATA	6360
CAGATAATAT	CAATCATTTT	CATAATCAGA	TGTTTCATGG	AAATGATACG	GATACGACTA	6420
TGTTGAGACT	TGGGGCGATG	AACATGATGC	TACATGGAGT	AGAAAAATCCA	CAAATCAGTT	6480

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ACCTTGACTC	GCTGTCTCAA	GATAATGAAG	AAGCCGATAA	ATATACTTTG	GTTTTAGCAA	6540
ATCCTCCTTT	TAAGGGCTCA	CTTGACTACA	ATTCAACCTC	TAATGACCTT	CTTGCAACCG	6600
TAAAAACCAA	AAAAACAGAA	TTACTCTTTC	TTTCTCTTTT	CTTGCGAACT	TTAAAACCAG	6660
GTGGACGAGC	AGCAGTTATC	GTACCTGATG	GTGTCCTTTT	TGGTTCGTCT	AAAGCTCATA	6720
AAGGAATTCG	TCAGGAAATT	GTAGAGAATC	ATAAGCTTGA	TGCTGTAATC	TCAATGCCTA	6780
GTGGTGTGTT	CAAGCCTTAT	GCTGGAGTTT	CAACTGCCAT	TCTCATCTTT	ACAAAAACTG	6840
GTAATGGTGG	TACTGACAAA	GTCTGGTTTT	ACGATATGAA	AGCGGATGGT	TTAAGTTTGG	6900
ATGATAAGCG	ACAACCGATT	AGCGACAATG	ATATTCCAGA	TATTATCGAA	CGCTTTCATC	6960
ATCTTGAAAA	AGAAGCAGAA	CGTCAGAGAA	CGGATCAATC	TTTCTTTGTT	CCAGTTGCTG	7020
AGATAAAGGA	AAATGATTAT	GATTTGTCTA	TCAATAAATA	TAAAGAGATT	GAGTATGAAA	7080
AAGTTGAGTA	TGAACCAACA	GAAGTCATAT	TAAAGAAAAT	CAATGATTTA	GAAAAAGAAA	7140
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AAGTGAAGTT	GGGGGAAGTC	TTATCTCTAA	AAAAAGGCAA	GAAAGCCACT	GTAAGTTGCTG	7260
AACAAACAAC	TCTAAGCCAA	CGTTATATTC	AAATAGATGA	TTTAAGAAAT	AATAATAATT	7320
TAAAATTCAC	TGAAAGTTTA	AATATGACTG	AAGCACTCCC	AGATGATATT	CTGATAGCAT	7380
GGGATGGAGC	TAATGCAGGA	ACAGTTGGTT	ATGGATTATC	GGGAGCTGTT	GGTAGTACAA	7440
TTACGGTCTT	AAAAAAGAAT	GAGCGATACA	AAGAAAAAAT	TATATCAGAT	TACTTGGGAG	7500
TCTTTTGGGA	AAGTAAATCG	CAGTATTTAC	GAGATCATTC	AACAGGTGCA	ACAATTCCTC	7560
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AGAACATTAT	CTGTATTCTT	AATACGATTA	AAAGGCTTAT	TACTAAAAGA	AAATTTTCAGT	7680
TAGATGAACT	AACTTGCTC	GTCAAATCCC	GATTTAACGA	GATGTTTGGG	GAAAATAAAA	7740
TATTTGAAAG	CATTGATAAC	TTATTTGATA	TTATAGATGG	TGATAGGGGC	AAAAATTATC	7800
CTAAATCAGA	TGAGTTGTTT	AGTGAGGAGT	ACTGTTTATT	TTTAAATACA	AAGAATGTTA	7860
CTAAAAACGG	ATTTTCATTC	GATACAAAGC	AATTTATCAC	TAAAACAAAG	GATAAATTAC	7920
TTCGAAAAGG	CAAACCTGAG	CGTTATGATA	TAGTCTTGAC	AACAAGAGGT	ACTGTTGGAA	7980
ATGTAGCGTA	CTACGATGAA	TTAATAAAAAT	ATAAACATTT	ACGTATAAAT	TCAGGTATGG	8040
TAATATTACG	TCCCAAGACA	CCAAATCTAA	ATCAGAAATT	TATTATCCAT	GTTTTAAGGA	8100
ATAATAATTA	TAGTCGAGTG	ATATCAGGAA	GTGCTCAGCC	TCAGTTACCA	ATTACAAAAT	8160
TAAAAAAAAT	ACTTCTCCCC	CTCCCCCCAC	TAGCCCTCCA	AAATGAGTTC	GCAGACTTTG	8220

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TAGTCCAGGT	CGACAAATCA	CAATTTGCTT	GTGAGATAGC	TATAAAAGTG	TGGAGAAATA	8280
GCTTGAAATT	TAGTATAATA	TAGCTAAACT	ATTTGTTTAA	AGTGAGAAAA	AAATGGGAAA	8340
TTTGTAGCTTT	CTTTTAAAAA	ATGACGAATA	TGAATCTTTT	TCAAAACCTT	GCATTGAAGC	8400
TGAGAATATG	ATTGCTACAT	CAACTGTGGC	TACTGCCTTT	ATGGCGCGTC	GTGCTTTAGA	8460
GCAGGCTGTC	CATTGGATAT	ATAGTCACGA	TTCATATTTA	GAAGCTCCCT	ATCGTGCTAC	8520
TCTATCTTCT	TTAGTATGGG	ATGATGATTT	TAGGGATATC	GTAGATTCTG	AACTCCACAA	8580
GCAGATAGTT	CTGTTGATTC	GGTGGGGAAA	CCATGCTGCT	CATGGTGGTG	AAATTAAGGA	8640
ACGAGAAGCG	ATTTTAGCTT	TGCATCATTT	GTATCAGTTT	GTAAATTTTA	TCGATTATTG	8700
TTACAGCAAT	GAGTTTGTGG	AGCGTTATTT	TGATGAGAAG	TGCTTACCAC	TTTCAGCAAA	8760
CATCAAATAC	CGAGAAACTC	CACAATCTAT	GATAAAGTTA	CAAGACAGTT	TACCAGAACT	8820
GCCTGATTTT	CATGAACAGA	TGGCTGCTCA	GTCCGTAGAA	GTTCAAGAGA	CTTATACTGA	8880
AAAACGTGAG	ACTGCAGCGC	AACGGCAAGA	TGTGCCTTTC	CATATTGATC	AATTATCTGA	8940
GGCAGAGACA	AGAAAGCTCT	TTATTGATAT	CGATCTCCGT	TTAGCAGGAT	GGATATTTGA	9000
AGAAAACTGT	CGTGTTGAGA	TAGCCGTTGA	TGGTCTCAAG	CACGGTTCAG	GAATTGGTTA	9060
CTGTGACTAT	GTACTTTATG	GTAAAAATGG	GAAAATTTTA	GCGATTGTGG	AGGCTAAAAA	9120
AGCCTCTGTC	AATCCAGAAG	TAGGGGAAGT	ACAGGTCAAA	GAATATGCTG	AAGCTTTGGA	9180
GAAACATATC	GGCTATCAGC	CAATTTGCTT	TATTACAAAT	GGGTGAAGC	ACTATATACT	9240
TGATGGTCCG	AACCGCCGCC	AGATTGCAGG	CTTTTACTCT	CAAGAAGAAT	TGCAATTAGT	9300
GATGGATAGA	CGTCATCTTC	AAAAACCGCT	TGAGGATATT	TCTAGTAAAA	TTAGGGACGA	9360
TATTTCCGGG	CGTCACTACC	AAAAACATGC	CATTGCAAGC	GTTTGTGAAG	CTTTCTCTGA	9420
TCATCGTAGA	CAGGCACTTT	TGGTTATGGC	AACTGGGGCG	GGGAAAACTC	GTACAGCAGT	9480
TTCTCTAGTT	GATATCTTAT	CACGTCATAA	CTGGGTAAAA	AACGTTCTCT	TCTTAGCCGA	9540
TAGAACTTCC	TTGGTTAAGC	AAGCATATGA	TTCGTTTAGA	AAATTACTCC	CAGATCTTTC	9600
CGTTTGTAAC	TTCTTAGAAG	ATAAAGAAGG	AGCTCAATCA	AGTCGCATGG	TCTTTTCAAC	9660
TTATCCGACC	ATGATTGGAG	CGATTAGTGG	TCAAGAAGAA	GTAAATCAAC	GCCCTTTCAC	9720
TGTTGGGCAT	TTTGACCTTA	TCATAATTGA	CGAATCTCAC	CGTTCTATTT	ATCAGAAATA	9780
CAAGTCCATT	TTTGATTATT	TTGATGCAAG	AATTGTAGGC	TTAACAGCTA	CTCCGCGTCA	9840
AGATTTAGAT	AAAAACACCT	ATGGATTCTT	TAATTTGGAG	AATGGGGTTC	CAACATATGC	9900
ATATGATTTG	GAAGAGGCTG	TTAAAGACGG	ATATTTAGTA	GCCTATCATT	CTATCGAAAC	9960
CAAACGAAA	CTACCTACGG	ATGGTCTACA	TTATGATGAT	TTGTCCGAAG	AAGAAAAGGA	10020

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ACATTTTGAT	AGCAAATTTG	AAGACAATAG	CTGTGAAAAA	GATATTGATG	GGAGTGTATT	10080
TAATTCCTTT	ATTTTCAATA	AAAGTACAGT	AGAAATTGTT	TTAAATGAAC	TCATGACAAG	10140
AGGAATTCAG	ACAGCCTCGG	GTGATGAAAT	TGGTAAAACT	ATTATTTTGT	CTAAAAATCA	10200
TGATCATGCG	GAATATATCA	GAGGTATTTT	TAACAACCGC	TATCCTGAAA	AAGGGAGCGA	10260
CTATGCTCAG	GTGATTGATT	ATAGTATTAA	GCATTATCAG	ACCTTGATTG	ATGATTTTAA	10320
AATTAAGGAG	AAGTATCCTC	AAATTGCGAT	TTCTGTGCGT	ATGTTAGATA	CAGGTATTGA	10380
TGTACCAGAG	GTTGTTAATT	TAGTCTTCTT	CAAGAAAGTA	CGCTCTAAAA	CTAAGTTTGT	10440
GCAGATGATT	GGTCGAGGAA	CCCGTCTATG	TAAAGATTTA	TTTGGACCTG	AGCAGGATAA	10500
GGAAAACTTC	TTGGTATTTG	ATTATGGGGA	CAATTTTGAT	TATTTTCGTG	CAGATCCAAG	10560
AGATGGAGAG	GGTCGTCACA	TTGTTTCGCT	GACTCAGCGT	TTATTTAATA	TCAAAGTGGA	10620
CTTGATTCGA	GAACCTCAGG	GACTCCAATA	CCAAGAAGAT	CAGTTTGCGA	GAGCATACCG	10680
TCAGCAGCTT	GTCTCGGAAC	TTCAAGGTCG	TATAGAGAGC	TTAAATGAGT	TGGACTTCAG	10740
GGTTCGTATG	GTTTTAGATA	CAGTTTATAG	CTATAGGAAA	TTGGAAAGTT	GGCAGAATCT	10800
AACTGCTGTT	ACAAGTGAAA	CCATTCAAAA	AAATCTCTCT	CCGCTTTTAT	TTGATGAAGA	10860
TAAAGAAGAT	GAGATGGCGA	GGAGATTTGA	TTTGTGGTTG	CTTCATATTC	AGTTGGGGCA	10920
ACTGACAGCT	AAATCTTCCA	CTGTTTCATAT	TTCCCAAGTG	ATGAAGACGG	CTAGAGCTCT	10980
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GGAGCCTGAA	TTTTGGAAAG	AAGTTAACTT	GTCTGATTTG	GAAAAAATTC	GTCTTGCTAT	11100
TCGAGATTTA	TTACAGTTTT	TGGATAAAAC	AGACCGTAAA	CCCTACTATG	TTAACTTTGA	11160
AGATCGTATA	CTCTCCACTG	TTCACGAGAC	CACAGCATTT	TTGCAGGTCA	ACGATCTTCG	11220
GTCTTACAAT	GAAAAAGTTG	AGCATTATTT	GAAAACTCAT	CTGGATGAGG	AGTCCATTTT	11280
TAAGCTATAC	CATAATAAAA	AGTTGACATC	TGATGATATG	CTTGCACTTG	AAAAATTGCT	11340
TTGGGAAAAA	TTAGGTAGTA	AAGCAGACTA	CCAAAGTCAT	TATGAAAATA	AGGCAATTCC	11400
GAGATTGGTT	CGTGAGATTA	TTGGCTTAGA	TAGAGAGTCT	GCCAATCGTA	TTTTTTCTAA	11460
ATTTTTGTCT	GATGAGAATC	TTAATGCCAG	GCAGATTTCA	TTTGTAATAA	TGATTGTAGA	11520
CTACATTGTA	GAAAATGGTT	TTTTAGAGAC	GAAAGTGTTA	ACGCAAGAGC	CGTTTAAATC	11580
TTATGGTTCT	GTTCAACTAC	TCTTCCAACA	CCAACTACCA	GTACTTCGTA	ATATTGTTCA	11640
AATCATTGAA	CTTATCAATA	ATCGAGCTGG	AGAAGCGGCT	TAAATTCTAA	AGTGATTGCC	11700
ATGCTGAGAC	TCATTTAAAA	TTAAAAAGAG	TAGAAATTTA	TGCTATATAT	GAGAAGTTTT	11760

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ATTAGGAAGA	ATGTCATCGT	TTTCCTAGAA	TACAGTATCA	GTTGTTAAGT	GGTTGATAAA	11820
TTTCAAAGTA	GATACTTGTA	CCACGATGTT	TGTTGATCGA	GTTATTAACA	AAAGAGCTAC	11880
TTTGATTTTA	AAGAAATAGA	AAACAAAAAG	CCGAGCAAGA	ATTCAATTGC	AGGAGAAAAT	11940
GAAATAATAC	TCAATGAAAA	TCAAAGAGCA	AACTAGGAAA	CTAGCTGCAG	GCTGCTCAAA	12000
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TAGGTATTTT	TTTTGCCCAA	ATTCTAGCAG	TTGGGCAGAT	AAGAGCCCCT	TGTTTGTA	13080
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TTGACCAAGT	GAGAAGGTTT	CACAGTTTTT	TTGCCCACCG	AAGTTATCAA	GTGATAACCA	13320
AGTCTGTGGA	GCTGTATTGT	CCTGCCAGAT	AACAGTAGGA	AGTTGAAAGT	CTGTTTCCTG	13380
TCCTAGTAAT	TTCTTGGTCA	ATAAGGCATT	TATGGACTCA	CGGAAGTCAA	TTGATTGCCA	13440
ATTGTTTCATG	TAAACATGGG	CACCATTATG	GAAAAAGAGA	TGCTTGTGTA	TATGAGTAGG	13500
AAGAGCATGG	AACATCTGGT	AAACATGAAG	TGGTTTGACA	TTCCAATCCT	GAGAACCATG	13560

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AGTAAAGACA	ACCTCTGCCT	TTACTTTTATG	GGCATTGAGC	AGATAATTGC	GGTCATGCCA	13620
AAACTGATTG	TAGTCCCCAG	TTTTTCGGTC	TAGCTGAGCT	TTCACCTTTT	CTAAGTCAGC	13680
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TTCACGGTAG	TAGTTGTACC	ATGATGAAAT	TCCTGCCTCG	GCAATGATAA	CTTCTAAACC	13860
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GTCTCCATTA	GTCATGAAAC	CTGTCGAGTC	TTTGGTACCA	ACACCTGAGA	CATAGAGATT	14100
GGCAAAGCCT	CTCGGAAGGA	AGTAGTCGTT	TAGTGTATAG	CTAGAGTTGA	TGTGAGTTAG	14160
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CCCTTTTTTG	TCAGTATCGA	CACGAGACTC	AACGTAAACG	ACTTCACGAA	TGACATCCTG	14460
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AGTATAAAAA	ATATCTGCTG	TCAGTTCATC	TTCTGATTGA	AAAAATGTCA	GCAGGTCTGT	14760
TTTTTTTATCA	GCTGCTAGGA	TAGAAAGTGG	GTAGTTGGTG	TCTTGATAAG	TGAAAAAGAA	14820
ACGACGTAAA	AAGGTTTCAA	GTGAGTCTTT	GTGATTGGCT	GTATTTTGTA	AATCAAAGCC	14880
ACATTTTTTT	AGTTCAGATA	AGACATTTTC	TTTTTGAAAA	TTGATATAAC	TATATTGATT	14940
AAAACGCATA	GAACCTCCAT	ATAGAATGAC	AGTTAAGGTT	ATTATATCAA	AAAAAAGCA	15000
GAAAGGGAAT	TGTAACTTC	AAAAGGAAAT	AATCCAATAA	AAATGAATAA	AGTACTAAAT	15060
TCAATATAGA	GAACAGAGTA	ACAATAAGAA	TAAATAGATA	GGGTATAAAA	GTTCTAGGAG	15120
ATTTATATTA	TATGCTTTCT	ATTTTTATAT	ACAATATAGT	ATAAATATAA	AAATGATGAC	15180
AAAAATACAA	ATGAATAGAA	AATAAATTAG	TAAGCTGATG	AAATTTTTCT	CAAGAGAAGC	15240
CATTTATAGG	TGAAAATGGT	ATAATATAGT	GAGAAGGATA	GAGGAGAAGT	GTAAATTGAT	15300

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CGCACAACTA	GATACAAAAA	CAGTCTATAG	TTTTATGGAA	AGCGTCATTT	CGATCGAAAA	15360
GTATGTGAGA	GCAGCTAAAG	AATACGGCTA	CACTCATTTG	GCTATGATGG	ATATTGACAA	15420
TCTTTATGGC	GCTTTCGACT	TTCTAGAGAT	TACAAAAAAA	TACGGCATTC	ATCCTTTGCT	15480
AGGGCTTGAA	ATGACAGTGT	TTGTAGATGA	TCAGGGAGTG	AATTTGCGCT	TTTTAGCTCT	15540
ATCTAGTGTG	GGCTATCAGC	AGTTGATGAA	GCTTTCGACA	GCCAAGATGC	AGGGGGAGAA	15600
AACTTGGTCA	GTCCTGTCCC	AGTACCTGGA	GGATATCGCG	GTCATTGTGC	CTTATTTTGA	15660
TAGAGTTGAG	TCGTTAGAAC	TAGGCTGTGA	TTACTATATA	GGGGTTTATC	CAGAAACACT	15720
AGCAAGCGAA	TTTCATCATC	CTATCTTACC	TCTTTATCGG	GTCAACGCTT	TTGAAAGCAG	15780
GGATAGAGAA	GTTCTTCAAG	TTTTAACAGC	GATTAAAGAA	AATCTACCGC	TCAGAGAAGT	15840
TCCCTTGCGT	TCGAGACAAG	ATGTCTTTAT	ATCAGCAAGT	TCTTTAGAGA	AACTATTCCA	15900
AGAGCGTTTT	CCGCAAGCTT	TGGACAATTT	AGAAAAGCTT	ATTTTCAGGCA	TTTCTTACGA	15960
CTTGGA TACT	AGTCTGAAAC	TGCCTCGTTT	TAATCCAGCT	AGACCAGCAG	TAGAGGAGTT	16020
GAGAGAGCGT	GCTGAACTGG	GGCTTGTTCA	GAAGGGGTTG	ACTAGTAAAG	AATATCAAGA	16080
TAGACTAGAC	CAAGAATTGT	CTGTTATTCA	TGATATGGGC	TTTGATGATT	ATTTCTTGGT	16140
TGTTTGGGAT	TTGTTGCGTT	TTGGACAATC	GAATGGCTAT	TATATGGGAA	TGGGAAGGGG	16200
TTCTGCAGTA	GGCAGTTTGG	TTTCTTATGC	CTTAGACATC	ACGGGGATTG	ACCCAGTAGA	16260
GAAAAATCTG	ATTTTTGAAC	GCTTTCCTAA	TCGTGAACGC	TATACCATGC	CTGATATTGA	16320
TATTGATATC	CCAGATATTT	ATCGTCCAGA	TTTTATCAGA	TATGTTGGTA	ATAAATATGG	16380
TAGTAAACAT	GCGGCACAAA	TCGTTACTTT	TTCAACCTTT	GGAGCCAAGC	AAGCTCTTCG	16440
AGATGTCTTG	AAACGCTTTG	GTGTGCCAGA	GTATGAATTA	TCTGCAATTA	CTAAGAAAAT	16500
CAGTTTTTCGT	GACAATCTTA	AGTCGGCCTA	TGAGGGAAAT	CTCCAGTTTC	GTCAGCAAAT	16560
CAATAGTAAG	TTAGAATACC	AAAAAGCTTT	TGAGATTGCT	TGCAAGATAG	AGGGCTATCC	16620
AAGGCAAACC	TCTGTCCATG	CGGCTGGTGT	TGTAATTAGT	GACCAAGATT	TAACCAACTA	16680
CATTCCTCTA	AAGTATGGTG	ATGAAATTCC	ACTGACTCAG	TATGATGCTC	ATGGAGTTGA	16740
GGCTAGCGGA	CTTTTGAAGA	TGGACTTTCT	GGGACTACGA	AATTTGACCT	TTGTCCAGAA	16800
GATGCAAGAG	TTGCTTGCTG	AAACAGAAGG	TATTCATCTG	AAAATTGAAG	AAATCGATTT	16860
AGAAGACAAA	GAAACGTTAG	CTTTATTTGC	CTCTGGTAAT	ACAAAAGGTA	TCTTTCAATT	16920
TGAGCAACCA	GGTGCCATTC	GTCTGCTTAA	GCGTGTGCAA	CCAGTCTGTT	TTGAAGATGT	16980
CGTCGCGACT	ACTTCTCTAA	ATCGACCGGG	TGCTAGTGAC	TATATCAATA	ATTTTGTGGC	17040
AAGAAAGCAT	GGGCAGGAAG	AAGTGA CTGT	TCTGGATCCA	GTACTGGAGG	ATATTTTGGC	17100

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TCCAACCTAC	GGCATAATGC	TCTATCAGGA	GCAGGTTATG	CAGGTTGCCC	AGCGACTTGC	17160
CGGATTTAGT	CTTGGGAAAAG	CCGATATTTT	GCGTCGGGCT	ATGGGGAAAA	AGGATGCCTC	17220
TGCCATGCAT	GAGATGAGGG	CTTCCTTTAT	TCAAGGTTCA	TTAGAAGCTG	GTCATACTGT	17280
GGAAAAAGCA	GAGCAGGTCT	TTGATGTTAT	GGAGAAGTTT	GCAGGTTATG	GTTTTAACAG	17340
GTCACACGCC	TATGCCTACT	CAGCCTTGGC	CTTCCAGTTG	GCTTATTTCA	AAACGCATTA	17400
TCCAGCCATT	TTTTATCAGG	TCATGTTAAA	TTCTTCCAAC	AGTGATTACT	TAATAGATGC	17460
ACTTGAAGCA	GGTTTTGAAG	TAGCCTCTCT	ATCCATCAAC	ACCATTC CCT	ATCACGATAA	17520
AATTGCCAAC	AAGGCCATCT	ATCTAGGTTT	GAAATCCATT	AAAGGAGTCA	GTAATGATTT	17580
AGCTCTCTGG	ATTATTGAAA	ATAGACCTTA	TTCTAACATT	GAAGATTTTA	TAGCTAAATT	17640
ACCTGAGAAT	TATCTGAAAC	TTCCTCTGCT	AGAACCTTTG	GTAAAAGTTG	GTCTTTTCGA	17700
TTCAATTTGAA	AAAAATCGTC	AAAAAGTATT	TAATAACTTA	GCTAATCTAT	TTGAATTTGT	17760
GAAAGAGTTG	GGAAGTTTGT	TTGGAGATGC	TATTTATAGT	TGGCAGGAAT	CGGAAGATTG	17820
GACGGAACAA	GAAAAATTTT	ATATGGAACA	AGAGCTTTTA	GGGATAGGTG	TCAGCAAACA	17880
TCCACTACAA	GCTATTGCAA	GTAAGGCTAT	TTACCCGATT	ACCCCAATCG	GAAATTTGTC	17940
AGAAAATAGC	TATGCTATTA	TCTTGGTTGA	AGTTCAGAAA	ATAAAAGTGA	TTCGTACCAA	18000
AAAGGGTGAA	AATATGGCCT	TCTTACAGGC	AGATGATAGT	AAGAAAAAAT	TGGATGTCAC	18060
TCTCTTTTCA	GACTTATATC	GTCAGGTTGG	ACAGGAAATA	AAAGAGGGAG	CCTTCTACTA	18120
TGTAAAAGGA	AAAATACAAT	CACGTGATGG	CCGTCTGCAA	ATGATTGCAC	AAGAAATAAG	18180
AGAAGCAGTT	GCTGAACGCT	TTTGGATACA	GGTGAAAAAT	CATGAATCGG	ATCAAGAAAT	18240
TTACGCGATT	TTAGAACAAT	TTAAAGGCCC	AATCCCAGTC	ATCATCCGGT	ATGAAGAGGA	18300
ACAGAAAACC	ATCGTTTCTC	CCCATCATTT	TGTAGCTAAA	TCCAATGAAT	TAGAGGAGAA	18360
ATTGAATGAA	ATCGTTATGA	AAACGATTTA	TCGCTAAAAA	TACGGAAAAAT	AGAAGAATTT	18420
TCAACGTAAA	TGTGGTATAA	TCAGTAAGAA	TGTTAAAAGA	AAAAGGAGCA	TAACCAATAT	18480
GAAACGTATT	GCTGTTTTGA	CTAGTGGTGG	AGACGCCCCCT	GGTATGAACG	CTGCCATCCG	18540
TGCAGTTGTT	CGTCAAGCAA	TTTCAGAAGG	AATGGAAGTT	TTTGGTATCT	ATGACGGATA	18600
TGCTGGTATG	GTTGCCGGTG	AAATTCATCC	CCTAGATGCA	GCTTCAGTAG	GGGACATCAT	18660
TTCTCGTGGT	GGTACTTTCC	TTCACTCAGC	TCGTTACCCA	GAGTTCGCTC	AACTTGAAGG	18720
GCAACTTAAA	GGGATTGAGC	AATTGAAAAA	ACACGGAATT	GAAGGTGTAG	TTGTTATCGG	18780
TGGTGACGGA	TCTTACCACG	GCGCTATGCG	TTTGA CTGAA	CATGGCTTCC	CAGCTATTGG	18840

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TCTTCCAGGT	ACAATCGATA	ACGATATCGT	TGGTACTGAC	TTTACAATCG	GTTTTGACAC	18900
AGCGGTACT	ACTGCCATGG	ACGCTATCGA	TAAGATTCGT	GATACATCAT	CAAGTCACCG	18960
TCGTACTTTT	GTAATCGAAG	TTATGGGACG	TAACGCTGGT	GATATCGCTC	TTTGGGCTGG	19020
TATTGCAACT	GGTGCTGATG	AAATCATCAT	CCCTGAAGCA	GGCTTCAAGA	TGGAAGATAT	19080
CGTAGCAAGC	ATCAAAGCTG	GTTATGAATG	TGGTAAAAAA	CACAATATTA	TCGTCTTAGC	19140
TGAAGGTGTG	ATGTCAGCGG	CTGAATTTGG	TCAAAAACTT	AAAGAAGCTG	GAGATACAAG	19200
CGACCTTCGT	GTAACAGAAC	TTGGACATAT	TCAACGTGGT	GGTTCTCCAA	CTGCGCGTGA	19260
CCGTGTTTTG	GCGTCACGTA	TGGGTGCACA	TGCTGTTAAA	CTTCTTAAAG	AAGGTATCGG	19320
TGGTGTTGCG	GTTGGTATTC	GTAACGAAAA	AATGGTTGAA	AATCCAATTC	TTGGTACTGC	19380
AGAAGAAGGG	GCATTGTTTA	GCCTTACTGC	AGAAGGTAAG	ATTGTGGTTA	ACAACCCAGC	19440
TACAAA						19446

(2) INFORMATION FOR SEQ ID NO: 52:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 16593 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 52:

TCGTAAATAT	GCTCTGTTTT	TGGATTTTGT	TTCTTAATCT	GTTTGGCAAG	TGCCTTCATC	60
ATAGAAATAG	GACCACACAT	ATAGACGGTT	GCATGTTCCG	GCACTTCTTT	TTGTTCAAAA	120
TTAAGATAGC	CGTCTTTCGT	ACTGTCGATT	AGATGGAGTT	CAAAATTAGG	ATTTTCTGA	180
GCATAGTTAC	GGAGTAAATC	TAGGTAGACT	GCATTTTCAT	CTCCACGGAA	GCTATAGTAG	240
AAGTGAACCT	GTTTATCTAA	AATAGGATGT	TCACGGATGT	AAGAGATGAA	GGGGGTGATC	300
CCAATACCTC	CAGCAATCCA	AACCTGATTT	TCTCGTCCTT	CTTCTATGAT	CATGTGTCCG	360
TAAGCTCTGT	CTAGGGTTAC	TTTGCTGCCG	GCTTGAAGAT	TATCATAGAT	ATTCTTGGTA	420
TGGTCGCCTG	AAGTTTAAAC	AGTAAAGTAA	AGAGTTTGAC	CATGACCTCC	TGAGATAGAA	480
AAGGGATGCG	GAGCACTTTC	AAAGCCTTCT	TGGAAAATCT	TTAGAAAGGC	AAATTGTCCT	540
GATTGATAGT	TGAAAGGTCT	GCTAAGATGG	ATTTGAATTT	CTCTAGTATC	GTGATTTAAG	600
CGTTTGAGAT	GGGTAATTTT	CCCTAGATAG	GGGAAGGAAA	TCTTTTGATA	TAGAAAAATG	660
ATATAAAAAC	CAGCTAGTAA	GCCTAAAAGG	GCATAGCTAC	CAACAAGAAA	ACTTAGAAGA	720
TTAAATGTAA	GGAGACGATT	GCCCATTATC	ATGTAGATGT	GAAAGAGTCC	TAAAATATAG	780

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GCTAGGTAAA CCAGGCGGTG AATCCATCGC CAAGCTTCGT ATTGGATGTA TTTGCCTAAA	840
TAGGCGACAA GGATGATGCT GGCAAAGATA TAGATGGCAA GATTGCCAAA CTGAGCAGCT	900
AAGCGAGAGC CCCACAAACC GCCCATACTA AAGTTATGAA AGATTAGTAG GATGATTGAG	960
AGAAAGGCTG TGAATTTGTG GACGGTGTAG ACCTTCTCCA AACTGTGAAA CCAGCTTTCT	1020
AGTAGTGGGA GACGAGTGGC TAGGATAAAA GTCAGAGATA GGCTTGTTAA AGCTAGTCCT	1080
GGAATCATGA ATTGGGGAGA AGTGTTTCATC CAAGTCAAAA GAGTCAAGAT AAAACTAGCT	1140
ATGATAAAGA GTAGTCCTTT GACTGATTTT ATAGAAAATT CCATTTTCATT TAGATTTCTGA	1200
TTTGTTGTAA ATAAATTTGT TACATTTTAT CATAGAAAAT GTATGGTGTC AAATTGAGGT	1260
CTATAAATAT CTACTCTCAT CAAAAAACTC TCCAATTGAA CTGGAGAGTG GCTGTTTATA	1320
CTCAATGAAA ATCAAAGAGC AAAGTAGGAA GCTAGCCGCA AGTTGCTCAA AACACTGTTT	1380
TGAGGTTGCA GATAGAGCTG ACGTGGTTTG AAGAGATTTT CGAAGAGTGT TATTCTGCAG	1440
CTTGTTGCCA ACGTTTGGCT AGCATATGAG ACAGGCTAGA AATTGCTAGG TTAAAGCTGA	1500
AGTAGATGAG GGCAATCAGG ATGTAAAGAC TGAAGACCTG CTCTGGTTCG AAATAACGGC	1560
CCATGAGAAT TTGGCTGGCT CCAAAGAGTT CTTGTAGGGC GATAACAGAG TAGAGGAGAC	1620
TGGTATCCTT AATCACGGTA ACAAACAGAG AAATGATGGC TGGTAGCATT TTGCGGATGG	1680
CTTGTTGGGAG AATGATGTAG TAGAGGATTT GGGCTGAGGT GAAGCCTTGT GACATTCCTG	1740
CTTCGTACTG TCCCTTGTCT ACGGCATTGA GACCGCCTCG AATAATCTCA GCCAAGGCTG	1800
CTGATGTAAA GAGAGTAAAG GCTGTAATAC CTGCTGGTGT GGATTTTCATT TTGAACACCA	1860
AAAAGATAGT AAAAATCCAG AGAAGGTTGG GAACGTTGCG CACAAACTCG ATATAAATAC	1920
TGGAAATAAT GCGTAAGACA GGATTTTTGC CATTTCTCGT GACAGCTAGC ACCGTACCGA	1980
TGATAGTAGA GAGGATGATG GCAATCAGAG AAATATAGAG GGTCAAGCCA AATCCTTTAA	2040
AGATAAAGAC TAGGTTATCT GGGGTAAAA CTTCTAAAAT AGATTCCATA GTAACCTCCT	2100
AAAGTGAATA GGCTTTTTTG TTGGCTTGCT CCATCTTGCG ACCAAACTGG GCAACAGGGA	2160
AGCATAGAGC AAAGTAGAGA AGAGCAGCAC CTAAAAAGGC TGGTATATAG TTTCCGTTGA	2220
GAGCCGACCA AGACTTAGTC ACAAACATCA AGTCTACTCC AGAGATGATA GCTACAGTAG	2280
AGGTGTTCTT GATGAGGTTA ACAATTTGGT TGGTCAATGG AGGGAGAATG ATGCGGAAGG	2340
CCTGAGGCAA GATAATCAAG CGCATGGCAC TGATATAGGT AAAACCTTGC GACAAGGCGG	2400
CCTCCATCTG ACCACTAGGA ATAGACTGAA TCCCTGAACG AATAACCTCA GCGATATAAG	2460
CGCCGTGATA GAGTCCCACG CAGAGAACGG CTGTCCAATA AATTGGAATC ATGATGATAT	2520

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GGTCACTGAT	AAGAGGTAGG	CCATAAAAAA	CAATAACAAA	CTGCACCAAG	AGGGGAGTAT	2580
TTTGGTAAAA	TTCAACAAAG	ATGCGAGCTA	AAATGCGTAA	AATTGGACGT	TACTGGTTG	2640
ACATGGCACC	AAAGAAGATG	CCCAAAACCA	TAGCGAGGAT	AAAGGAACCA	ACCGCTAGGG	2700
CAAGGGTGAA	GAGGAAACCA	TTGAAAAATT	GTCCAAAATC	CTGAAAATAG	GCTGTCCAAG	2760
ATGATAAATC	TGTCATGGGG	TGTCCTCCTT	AATCTGCAGT	ATGGCTAGAT	GGTTTGAGCT	2820
TGTAACGGTC	ATAAAGTTTC	TGCAAACTAC	CATCCTTGCT	CCATTTAGTA	ACCAAGTTAT	2880
CAAGATAGTC	GTTGAGCTCT	GTATTTGATT	TCTTGGTAAAC	AATACCGTAG	TCAGATGGCT	2940
TGAAACTATC	ATCTAGTAGT	GCTGTCCGTT	TACTAGTGTA	GCCAGATAGA	ATAGAGCGGT	3000
CAACGGAAAA	GGTATCGATA	CGATGAGCGT	GCAGGGAAGT	AATCAATTCT	GGGTAGGAAC	3060
CAAGTTCGAC	GAATTTAAAC	TTCAGACCTT	TCTTTTTTACC	CAGTTCAGTA	ATCAGGCGTT	3120
GGGTGATAGA	ACCTTGGGCG	ACTCCGATGG	TTTTGCCGTT	TAGGTCTCTCA	ATCTTTTTGA	3180
TTTTGGCAGA	TTTATTGACC	AAAAATCCAG	AAGCGTCTGT	GTAGTAGGGA	CTGGTAAAGT	3240
TGTAGAGTTT	TTTGCGTTTCG	TCCGTGATGG	TAAAGGTCCG	GATATCCATA	TCGACCTGTT	3300
CATTGTCTAG	AAGGGGGCCG	CGGGTTTGTG	CTGTAACCGG	CACATAGCGA	ATCTTGACCT	3360
TGAGTTCATC	AGCTACCATC	TTGGCCAAGT	CGGTTCGAT	ACCAGAATAA	GTACCGGTCT	3420
TGGGATCTTT	GTAACCAAAA	TTGGGAACGT	CTTGTTTGAC	ACCGACAACC	AGTTCGCCTC	3480
TTTTTTGAAT	GTCTGCGATA	CTTGTATCAG	CCTGGACTGG	TTTGGCAGCA	GCAAGGCCGA	3540
AAAGGCTAAT	CAATAATGCT	GATAAAAAGA	ATTTTTTTTC	ATAGGCGCCT	CCTTATTTGA	3600
CTTTGTCACT	TCGTGGTTG	ATAATTTTGC	TGAGGAATTG	TTGGGCACGA	GGTTCGCTTG	3660
GATTGTCAAA	AAAGTTATCG	ACATCTGTCG	TATCTACTAA	AACTTCTCCG	TCGGCCATAA	3720
AGATAATGCG	GTCCGCAACC	TCTCGAGCAA	AGCCCATTTC	GTGGGTAACG	ATGATCATGT	3780
TCATCCCATC	ATGCGCCAGT	TTCTGCATAA	CTGCTAGAAC	ATCTCCGATA	GTCTCAGGAT	3840
CAAGAGCAGA	TGTTGGTTCA	TCAAAGAGGA	GGAGTTCCGG	ATGCATAGCA	AGACCACGAG	3900
CGATGGCGAT	CCGCTGTTTT	TGTCCACCAG	ATAGCATGGC	GGGATAGGAA	TCTTTCTTGT	3960
CCCACATATT	TACAAATTCC	AGATATTTTT	GGGCGGTTTT	TTCAGCTTCT	TTTTTATCAA	4020
TTCCTAGAAC	TTCAATGGGT	GCAAGCGTTA	CGTTTTCTAA	CACAGCTTTG	TGTGGATAAA	4080
GGTTAAAATG	TTGAAAAACC	ATGCCGACTT	CCTTGCGAAG	AGGTACCAAA	TCTTTCTGGC	4140
TGGCACCAGC	AACTTGGTGC	CCATTGACTA	GGAGACTTCC	TTTGTCAACA	GTCTCTAAAC	4200
CATTGATCGT	ACGGATAAGA	GTGGACTTCC	CAGAGCCAGA	AGGTCCAAGC	AGGACAACAA	4260
CTTGTCCTTT	TTCAAAACGG	AGATTGATGT	TGCGGAATGC	GTGGTAGTCT	CCGTAATATT	4320

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TTTCGACGTT	TTTAAATTCT	ACTAAAGCCA	TGAGAGATCT	CTATTGTGTT	ATATTTTATA	4380
ACACGGTTCT	ACAATAAAAG	AATGTTCTTG	TCAAATCATA	TCTGAAAAAA	TTCACATATAG	4440
TGAAATAAGA	ACAGGAAAAA	TCGATCGGGA	CAGTCAAATC	GATTTCCTAAC	AATATTTTAG	4500
AAGTAGAGGT	GTACTATTCT	AGTTTCAATA	TACTATAAAA	TGTTATAAAA	AAGCAATCTG	4560
GATAGAGAAA	ACGTCTAAAT	CATGTTATAA	TGAAGCAATA	GAATTCCTTAG	AAAGAGTGGA	4620
TGTCTTTTTG	ATAACACCTA	CTTATGAATG	GCAGTTTGCC	CTGCAGGTAG	AAGATGCGGA	4680
TTTTACAAAG	ATAGCCAAGA	AGGCTGGACT	GGGTCCTGAG	GTGGCTCGGT	TATTGTTTGA	4740
GAGAGGGATT	CAGAACCAAG	AAAGTCTGAA	GAAGTTTTTA	GAACCTTCCT	TGGAGGACTT	4800
ACATGATGCT	TATCTGCTCC	ATGATATGGA	CAAGGCAGTG	GAGCGGATTC	GTCAGGCTAT	4860
TGAAGAAGGG	GAAAATATTC	TTGTTTATGG	AGACTATGAT	GCGGATGGCA	TGACTTCGGC	4920
TTCTATTGTG	AAGGAAAGTT	TGGAACAAC	TGGTGCTGAG	TGCCGAGTTT	ACCTGCCAAA	4980
TCGTTTTACC	GATGGCTATG	GCCCTAATGC	TAGTGTTTAT	AAATACTTTA	TCGAGCAAGA	5040
AGGGATTTC	TTGATTGTGA	CGGTGGACAA	TGGGGTTGCT	GGTCATGAGG	CTATTGCATT	5100
GGCTCAGTCT	ATGGGAGTAG	ATGTCATTGT	GACAGACCAT	CATTCCATGC	CTGAAACCCT	5160
GCCAGATGCT	TATGCTATTG	TCCATCCTGA	ACATCCAGAT	GCGGATTATC	CTTTTAAATA	5220
TTTGGCTGGT	TGTGGAGTTG	CTTTCAAGTT	GGCTTGTGCC	CTGTTAGAAG	AAGTGCAAGT	5280
GGAATTGCTT	GATTTGGTCG	CTATTGGAAC	TATTGCAGAT	ATGGTGAGTC	TGACGGATGA	5340
AAATCGTATC	TTAGTTCAAT	ATGGTCTGGA	AATGTTGGGT	CATACCCAGC	GCATTGGTCT	5400
GCAAGAAATG	CTGGACATGG	CTGGGATTGC	TGCCAACGAA	GTAACAGAAG	AAACGGTTGG	5460
TTTCCAGATT	GCTCCTCGTT	TGAATGCCTT	GGGTCGCTTG	GATGATCCCA	ATCCTGCCAT	5520
TGATTTGTTG	ACTGGATTTG	ATGATGAGGA	AGCGCATGAG	ATTGCCCTTA	TGATTCACCA	5580
GAAAAACGAA	GAGCGCAAGG	AAATCGTTCA	GTCTATCTAT	GAAGAAGCCA	AGACCATCGT	5640
GGATCCTGAG	AAGAAGGTTT	AGGTCTTGGC	CAAGGAAGGC	TGGAATCCTG	GGGTTCCTAGG	5700
AATCGTGGCT	GGTCGTTTAT	TGGAAGAATT	GGGACAGACA	GTCATTGTTC	TTAATATAGA	5760
AGACGGTCGT	GCCAAGGGCA	GTGCTCGTAG	TGTGGAAGCG	GTCGATATTT	TTGAAGCTCT	5820
GGATCCCCAT	CGAGACCTCT	TCATCGCCTT	TGGAGGTCAT	GCAGGTGCAG	CGGGTATGAC	5880
GCTGGAAGTT	GAGCAACTCT	CAGATTTATC	TCAGGTTTTG	GAAGATTATG	TTCGTGAAAA	5940
AGGTGCAGAT	GCTGGTGGCA	AGAATAAGTT	AAACCTAGAT	GAAGAGTTGG	ATTTGGAGGC	6000
ACTTAGCTTG	GAAACGGTCA	AAAGTTTTGA	ACGTTTAGCT	CCTTTTGGAA	TGGATAATCA	6060

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GAAACCTATT	TTTTATATCA	AGAATTTTCA	GGTCGAAAGT	GCTCGTACTA	TGGGGGCAGG	6120
TAATGCCCCAT	CTAAAGCTGA	AAATTTCCAA	GGGTGAGGCG	AGTTTTGAAG	TGGTAGCCTT	6180
TGGTCAAGGC	AGATGGGCGA	CAGAGTTTTC	TCAAACCAAG	AATCTAGAGT	TAGCGGTAA	6240
ATTGTCTGTC	AACCAATGGA	ATGGCCAAAC	TGCCCTCCAG	TTGATGATGG	TGGATGCGCG	6300
AGTGGAAGGT	GTTCAACTTT	TTAACATTCG	TGGAAAAAAT	GCAGTCTTGC	CAGAAGGTGT	6360
TCCAGTCTTG	GATTTTCCTG	GAGAACTGCC	AAATCTTGCG	GCTAGTGAAG	CTGTTGTCGT	6420
AAAAAACATT	CCAGAGGATA	TTACTCAGCT	GAAGACCATT	TTTCAGGAAC	AGCATTTCTC	6480
TGCTGTCTAT	TTCAAAAAATG	ATATTGACAA	GGCTTATTAT	CTGACAGGTT	ATGGGACTAG	6540
AGATCAGTTT	GCCAAATTGT	ACAAGACTAT	TTACCAGTTC	CCAGAGTTTG	ATATTCGCTA	6600
CAAGCTGAAA	GATTTGGCTG	CATATCTTAA	TATTCAACAA	ATCTTGCTGG	TCAAGATGAT	6660
TCAAGTATTT	GAAGAACTAG	GCTTTGTGAC	GATAAAAGAT	GGTGTGATGA	CAGTCAATAA	6720
AGAGGCGCCA	AAGCGGGAGA	TAGGAGAAAG	TCAAATTTAC	CAAAATCTCA	AACAAACCGT	6780
TAAAGACCAA	GAAATGATGG	CGCTGGGTAC	GGTGCAAGAA	ATTTATGATT	TTTTGATGGA	6840
AAAAGAGTAG	AAGTTAGGAA	AGAGTTGGGA	AATCAACTCT	TTTTTGAAAA	CAGACCTTCA	6900
TTTTGAAAAT	CATCAAAAAA	ATGGTATAAT	GGTAGGAAAA	GATTCGGCTG	AAAGTATCAG	6960
AACTTTTAGA	ATAAGAGGGT	AGAATTGCCC	TATAATCAAG	ATAAACTAAG	ATTTTGGAGG	7020
AAAAATGAGT	AATATCAGTT	TAACAACACT	TGGTGGTGTG	CGTGAGAATG	GAAAAAATAT	7080
GTACATTGCT	GAAATTGGAG	AGTCCATTTT	TGTTTTGAAT	GTAGGGTTAA	AATATCCTGA	7140
AAATGAACAA	TTAGGGGTCTG	ATGTGGTGAT	TCCAAACATG	GATTACCTTT	TTGAAAATAG	7200
CGACCGTATT	GCTGGGGTTT	TCTTGACCCA	CGGGCATGCG	GATGCCATTG	GTGCTCTACC	7260
GTATCTCTTG	GCAGAGGCTA	AAGTTCCTGT	ATTTGGGTCT	GAGTTGACCA	TTGAGTTGGC	7320
AAAGCTCTTT	GTCAAAGGAA	ATGATGCCGT	TAAGAAATTT	AATGATTTCC	ATGTCATTGA	7380
TGAGAATACG	GAGATTGATT	TTGGTGGGAC	AGTGGTTTCC	TTCTTCCCTA	CGACTTACTC	7440
CGTTCCAGAG	AGTCTGGGAA	TTGTCTTGAA	GACATCGGAA	GGAAGCATCG	TTTATACAGG	7500
TGACTTCAAA	TTTGACCAAA	CGGCTAGTGA	ATCTTATGCA	ACTGATTTTG	CTCGTTTGGC	7560
AGAGATTGGT	CGTGACGGCG	TCCTGGCTCT	CCTCAGTGAT	TCGGCCAATG	CAGACAGCAA	7620
TATTCAGGTG	GCTAGTGAAA	GTGAAGTTAG	GGATGAAATT	ACCCAAACTA	TTGCTGACTG	7680
GGAAGGTCGT	ATCATCGTTG	CAGCTGTTTC	CAGTAATCTT	TCTCGTATTC	AGCAGATTTT	7740
TGACGCTGCG	GATAAACAG	GTCGACGTAT	CGTCTTGACA	GGATTTGATA	TTGAAAATAT	7800
CGTCCGCACA	GCGATTGCTC	TTAAGAAGTT	GTCTTTAGCC	AACGAAATTC	TTTTGATTAA	7860

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GCCTAAAGAT	ATGTCTCGCT	TTGAAGACCA	TGAGTTGATT	ATTCTTGAGA	CAGGTCGTAT	7920
GGGTGAGCCT	ATCAATGGAC	TTCGTAAGAT	GTCGATTGGT	CGCCATCGTT	ATGTAGAAAT	7980
CAAGGATGGG	GACCTAGTCT	ATATTGCTAC	GGCTCCGTCT	ATTGCTAAAG	AAGCCTTTGT	8040
TGCGCGTGTG	GAAAATATGA	TTTATCAGGC	AGGTGGGGTT	GTCAAATTGA	TTACCCAAAG	8100
TTTACATGTA	TCAGGGCACG	GAAATGTGCG	TGATTTGCAG	CTGATGATCA	ATCTTTTGCA	8160
ACCTAAGTAC	CTCTTCCCTG	TCCAAGGGGA	GTATCGTGAG	TTGGATGCTC	ACGCTAAGGC	8220
TGCCATGGCA	GTTGGGATGT	TGCCAGAACG	CATCTTCATT	CCTAAAAAGG	GGACGACCAT	8280
GGCTTACGAG	AATGGAGACT	TTGTTCCAGC	TGGATCGGTT	TCAGCAGGAG	ATATCTTGAT	8340
TGATGGGAAT	GCCATTGGTG	ATGTTGGAAA	TGTTGTTCTT	CGTGACCGTA	AGGTCTTGTC	8400
AGAGGATGGA	ATTTTCATCG	TGGCTATTAC	AGTCAACCGT	CGTGAGAAGA	AAATTGTGGC	8460
TAGGGCTCGT	GTTACACACG	GTGGATTTGT	TTATCTCAAG	AAGAGTCGCG	ATATTCTCCG	8520
TGAAAGTTCA	GAATTGATTA	ACCAAACGGT	AGAAGAGTAT	CTTCAAGGAG	ATGACTTTGA	8580
CTGGGCAGAT	CTCAAAGGTA	AGGTTCGTGA	CAATCTGACC	AAGTACCTCT	TTGATCAAAC	8640
CAAGCGTCGC	CCAGCCATTT	TACCAGTAGT	CATGGAAGCA	AAATAATCGT	TGAAATAAAC	8700
AGAGAGAAAG	TCGAGTTTCG	GCTTTTTCTT	ATAGAAAAAT	AGAAGGAGAA	AATCATGGCA	8760
GTGATGAAAA	TCGAGTATTA	CTCACAAGTA	TTGGATATGG	AGTGGGGGGT	GAATGTCCTC	8820
TACCCTGATG	CCAATCGAGT	GGAAGAACCA	GAGTGTGAAG	ATATTCCCGT	CTTGTACCTT	8880
TTGCACGGGA	TGTCTGGAAA	TCATAATAGT	TGGCTTAAGC	GGACCAATGT	AGAACGCTTG	8940
CTTCGAGGAA	CTAATCTCAT	CGTTGTTATG	CCCAATACCA	GCAATGGTTG	GTACACCGAT	9000
ACCCAGTATG	GTTTTGACTA	CTACACGGCT	CTAGCAGAGG	AATTGCCACA	GGTTCTGAAA	9060
CGCTTCTTCC	CTAATATGAC	GAGCAAGCGT	GAAAAGACCT	TTATCGCTGG	TCTTTCTATG	9120
GGAGGCTACG	GCTGCTTCAA	ACTGGCTCTT	ACGACAAATC	GTTTTTCTCA	TGCAGCTAGT	9180
TTTTTCAGGTG	CCCTCAGCTT	TCAAACTTTT	TCTCCTGAAA	GTCAAAATCT	GGGAAGTCCA	9240
GCCTACTGGA	GAGGTGTTTT	TGGAGAGATT	AGAGACTGGA	CAACTAGTCC	CTATTCTCTT	9300
GAAAGTCTGG	CTAAAAAATC	GGATAAAAAG	ACCAAACCTT	GGGCGTGGTG	TGGCGAACAG	9360
GATTTCTTGT	ACGAAGCCAA	TAATCTCGCA	GTGAAAAATC	TCAAAAAACT	AGGTTTTGAT	9420
GTGACCTATA	GCCATAGCGC	TGGAACTCAC	GAGTGGTACT	ACTGGGAAAA	ACAATTGGAA	9480
GTTTTTTTAA	CAACCCTACC	AATTGATTTC	AAATTAGAAG	AGAGACTGAC	TTAGTTTGAA	9540
CTTCAGCATA	GGGGGAGTAG	AACTAAAATA	AAATATGTTT	TCACTAGACT	TTTCAAACGm	9600

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AAGTAGTAGA	ATAGTAATAA	AATACTGGAG	GAAAGAGAGT	AGGAAATGTA	CCGTTATCAA	9660
ATTGGCATTTC	CCACATTAGA	ATATGATCAG	TTTGTCAAAG	AACATGAATT	AGCCAATGTA	9720
TTACAAAGTA	GTGCTTGGGA	GGAAGTTAAG	TCTAATTGGC	AACATGAGAA	GTTTGGTGTT	9780
TACAGGGAAG	AAAAATTACT	GGCGACAGCT	AGTATTTTGA	TTAGAACTCT	TCCGCTAGGC	9840
TATAAAATGT	TTTACATCCC	AAGAGGACCT	ATATTGGATT	ATGGGGATAA	AGAACTCTTG	9900
AATTTTGCCA	TTCAGTCTAT	TAAGTCCTAT	GCTCGCAGTA	AGAGAGCGGT	TTTTGTGACT	9960
TTTGACCCAA	GTATTTGCCT	ATCTCAAAGT	TTAATCAATC	AGGAAAAGAC	AGAATTTCCCT	10020
GAAAATCTGG	CTATTATTGA	TAGTTTGCAA	CAAATGGGAG	TAAGGTGGTC	AGGAAAAACG	10080
GAGGAAATGG	GAGACACCAT	TCAACCTCGT	ATTCAGGCGA	AAATATACAA	GGAAAATTTT	10140
GAAGAAGATA	AACTTTCCAA	GTCAACAAAA	CAGGCTATTC	GAACAGCACG	AAACAAAGGG	10200
CTTGAGATTTC	AATATGGTGG	ACTGGAACCTA	TTAGATTTCAT	TTTCGGAGTT	GATGAAAAAA	10260
ACTGAGAAGC	GAAAAGAGAT	TCATTTGAGG	AATGAAGCCT	ATTATAAAAA	ATTGTTAGAT	10320
AATTTTAAGG	ACAAGGCCTA	TATCACCTTG	GCCACCTTGG	ATGTTTCTAA	ACGTTTCGCA	10380
GAGTTAGAAG	AACAGTTAGC	GAAAAATAGA	GCCTTGGAAG	AGACCTTTAC	TGAGTCGACT	10440
CGAACTTCAA	AAGTAGAAGC	GCAGAAGAAG	GAAAAAGAAC	GTTTGTTAGA	GGAATTGACC	10500
TTCTTGCAAG	AATATATAGA	TGTAGGTCAA	GCGAGAGTTC	CTTTAGCGGC	TACTTTGAGT	10560
TTGGAATTTG	GTACTACCTC	TGTCAATATA	TATGCTGGTA	TGGATGATGA	TTTTAAACGT	10620
TACAATGCAC	CAATTTTAAC	TTGGTATGAA	ACGGCTCGCT	ATGCCTTTGA	ACGAGGTATG	10680
ATCTGGCAAA	ATTTAGGTGG	TGTTGAAAAC	TCTCTCAATG	GTGGACTTTA	TCATTTTAAG	10740
GAAAAATTTA	ATCCAACGAT	TGAAGAATAC	TTGGGTGAAT	TTACAATGCC	CACTCATCCT	10800
CTCTATCCTC	TGTTAAGACT	TGCTCTTGAT	TTCCGTAAAA	CATTAAGAAA	AAAACATAGA	10860
AAGTAAGTAT	ATGGCACTAA	CAACACTCAC	GAAAGAAGAG	TTTCAGACTT	ATTCTGATCA	10920
GGTTTCTTCT	CGTTCCTTTA	TGCAATCTGT	CCAGATGGGG	GATTTGCTAG	AAAAAAGAGG	10980
GGCTCGAATT	GTTTATCTTG	CTTTGAAACA	AGAAGGAGAA	ATTCAAGTTG	CAGCTCTGGT	11040
TTATAGCCTG	CCCATGCTGG	GTGGTCTGCA	TATGGAAGTC	AATTCGGGGC	CGATTTATAC	11100
CCAACAAGAT	GCTCTTCCAG	TTTTTTTATGC	AGAGTTAAAA	GAATATGCCA	AGCAAAATGG	11160
TGTATTAGAG	TTGCTTGTA	AACCCTATGA	AACTTATCAA	ACTTTTGATA	GCCAAGGTAA	11220
TCCAATAGAT	GCTGAGAAAA	AAAGTATTAT	TCAAGATTTG	ACTGATTTAG	GTTATCAATT	11280
TGATGGCTTA	ACAACAGGTT	ACCCAGGTGG	AGAACCAGAT	TGGTTATACT	ATAAAGATTT	11340
AACTGAATTA	ACTGAAAAGA	GTTTGCTTAA	AAGTTTTAGC	AAAAAGGGTA	AACCCTTGGT	11400

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GAAAAAGGCT	GAAACCTTTG	GCATTCGGTT	GAAAAAGTTA	AAACGTGAAG	AACATATCGAT	11460
TTTTAAGAAT	ATAACAAAAG	AAACCTCTGA	ACGTAGAGAA	TATAGTGATA	AAAGTTTAGA	11520
ATATTATGAG	CATTTTTATG	ATACTTTTGG	AGAACAAGCG	GAGTTTCTCA	TAGCAAGCTT	11580
AAATTTTTTCG	GACTATATGA	GCAAATTGCA	AGGTGAACAA	AGTAAACTAG	AAGAAAACCTT	11640
GGACAAGTTG	CGACTTGATT	TGAGTAAAAA	TCCTCATTCT	GAGAAAAAAC	AAAATCAACT	11700
GAGAGAATAT	TCTAGTCAAT	TTGAAACGTT	TGAAGTTCGA	AAAGCAGAAG	CGCGAGACTT	11760
GATTGAAAAA	TATGGAGAAG	AAGATATTGT	TTTAGCTGGG	AGTTTATTTG	TTTATATGCC	11820
TCAGGAAACG	ACTTATCTCT	TTAGTGGTTC	CTACACTGAG	TTTAATAAGT	TCTATGCCCC	11880
TGCACTGCTT	CAAAAATATG	TTATGTTGGA	AAGCATAAAA	CGTGGAATAC	CTAAATACAA	11940
CTTCCTAGGC	ATTCAAGGGA	TTTTTGATGG	AAGTGATGGT	GTTTTGCGTT	TTAAACAGAA	12000
TTTTAATGGC	TATATTGTAC	GCAAAGCAGG	TACTTTCCGT	TACCATCCAT	CGCCTTTAAA	12060
ATACAAAGCT	ATCCAGTTAC	TCAAAAAAAT	AGTAGGACGT	TAAGATGAAA	AAGTCAGTAT	12120
TTAGATTCTT	TTTAGCTTCT	TTTAGTAAAA	TAATTCTTAT	TTGCTAGAAA	GGTGGAGAGA	12180
CATGCGCTGG	CTTTTTTCGT	TGATAGGGGC	TTTCTTTTCT	TTTGTGTGGC	GTTTGTTTTG	12240
GCGTCTGGTT	TGGATAGTTG	TGCTCTTATG	TGTGCTTGCT	TTCCGACTTC	TCTGGTATCT	12300
GAACGGAGAT	TTTCAAGGAG	CGCTAAAGCA	AGCAGAACGG	TCAGTAAAAA	TTGGTCAACA	12360
AAGTATTGAC	CAATGGGAGA	AAACAGGGCA	ACTGCCTAAG	TTAAGCCAGA	CAGATAGTCA	12420
CCAGCATCTT	GAAGGAAGGT	GGGCACAGGC	CTCTGCTCGT	ATTTACCTGG	ATCCGCAGAT	12480
GGATTCACGC	TTTCAAGAGG	CTTATTTAGA	AGCAATCCAG	AACCTGGAATC	AAACTGGTGC	12540
TTTTAACTTT	GAACTCGTGA	CTGAGTCTAG	TAAGGCGGAT	ATTACGGCTA	CGGAGATGAA	12600
CGACGGAGGC	ACTCCTGTGG	CAGGAGAGGC	GGAAAGTCAA	ACTAATCTCT	TAACAGGGCA	12660
ATTCTTGCTC	GTAACGGTGC	GGTTGAATCA	TTATTATTTG	TCCAATCCAT	ACTATGGCTA	12720
CTCCTATGAA	CGCCTTGCTC	ATACGGCAGA	ACATGAGTTA	GGTCATGCCA	TTGGCTTGGA	12780
CCATACAGAT	GAGAAGTCTG	TCATGCAACC	AGCAGGTTCC	TTTTATGGTA	TCCAGGAAGA	12840
GGATGTTGCA	AACCTCCGAA	AAATATATGA	GACTAGTGAG	TAGGGTACTA	TCTTTCCCTA	12900
CTTTTTTTGC	TATAATGGAA	CTATGAACAA	CTTGATTAAA	TCAAAACTAG	AGCTCTTGCC	12960
GACCAGCCCT	GGTTGCTACA	TTCATAAGGA	TAAAAATGGC	ACCATTATCT	ATGTAGGAAA	13020
GGCTAAAAAT	CTGCGTAATC	GAGTACGGTC	CTATTTTCGT	GGAAGTCATG	ATACCAAGAC	13080
AGAGGCTCTG	GTGTCTGAAA	TTGTGGATTT	TGAATTTATT	GTTACGGAGT	CTAATATTGA	13140

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GGCACTTCTC	CTAGAAATCA	ACCTGATCAA	GGAAAACAAG	CCCAAGTACA	ATATCATGCT	13200
CAAGGATGAC	AAGTCCTATC	CTTTCATCAA	AATCACCAAT	GAGCGCTATC	CACGCTTGAT	13260
TATCACTCGT	CAGGTCAAAA	AGGACGGAGG	TCTTTATTTT	GGACCCTATC	CCGATGTGGG	13320
GGCAGCCAAT	GAAATCAAGC	GGTTGCTGGA	TCGGATATTC	CCTTTTCGTA	AGTGTACCAA	13380
CCCGCCCTCT	AAGGTCTGTT	TTTATTACCA	TATCGGCCAG	TGTATGGCCC	ACACCATCTG	13440
TAAGAAGGAT	GAGGCTTATT	TCAAGTCTAT	GGCCCAGGAG	GTGTCTGATT	TTCTGAAAGG	13500
TCAGGATGAC	AAAATCATCG	ATGATCTCAA	GAGTAAAATG	GCAGTAGCAG	CACAAAGTAT	13560
GGAGTTTGAA	CGTGCGGCGG	AATACCGTGA	CCTGATTGAG	GCTATTGGAA	CGCTTCGAAC	13620
CAAGCAACGG	GTCATGGCGA	AAGATTTGCA	AAATCGCGAT	GTCTTTGGCT	ACTATGTGGA	13680
TAAGGGCTGG	ATGTGTGTGC	AGGTTTTCTT	TGTCCGTCAG	GtAAGCTCAT	CGAGCGCGAT	13740
GTCAATCTCT	TCCCCTACTT	CAATGATCCA	GATGAGGATT	TTTTGACCTA	TGTAGGACAA	13800
TTCTATCAAG	AAAAATCTCA	TCTAGTTCCC	AATGAGGTAC	TGATTCCGCA	GATATTGACG	13860
AAGAAGCTGT	CAAGGCTTTG	GTGGATTCCA	AGATTCTTAA	GCCTCAACGT	GGAGAGAAAA	13920
AACAACCTGGT	CAATCTAGCC	ATAAAAAATG	CTCGTGTTAG	TCTAGAGCAG	AAGTTCAATC	13980
TGCTAGAAAA	ATCTGTGCGA	AAGACTCAAG	GAGCTATTGA	AAATCTAGGG	CGTTTGCTCC	14040
AAATCCCGAC	CCCAGTACGT	ATCGAGTCCT	TCGATAACTC	TAATATCATG	GGAAC TAGCC	14100
CTGTTTCGGC	TATGGTGGTC	TTTGTCAACG	GTAAACCGAG	TAAGAAGGAT	TACCGTAAGT	14160
ACAAGATAAA	AACGGTTGTT	GGACCAGACG	ACTATGCCAG	CATGAGAGAG	GTCATTGCGA	14220
GACGCTATGG	TCGAGTACAG	CGTGAGGCTT	TGACTCCTCC	AGATTTGATT	GTGATTGATG	14280
GGGGGCAAGG	TCAAGTCAAT	ATCGCTAAGC	AGGTTATCCA	AGAGGAACTG	GGCTTGATA	14340
TTCCAATTGC	TGGGCTGCAA	AAGAATGATA	AGCACCAAAC	CCATGAATTG	CTCTTTGGAG	14400
ATCCGCTTGA	GGTGGTGGAT	TTGTCTCGCA	ATTCTCAGGA	ATTTTTCCTC	CTCCAACGCA	14460
TCCAAGATGA	GGTGCACCGC	TTTGCTATCA	CTTTCCACCG	CCAAC TGCGC	TCCAAAAATT	14520
CTTTCTCATC	TCAATTGGAT	GGGATTGACG	GTCTGGGACC	TAAACGCAAG	CAGAATCTTA	14580
TGAAGCATTT	CAAGTCTTTG	ACCAAAATCA	AGGAAGCCAG	TGTGGATGAG	ATTGTGGAAG	14640
TTGGGGTACC	TAGAGTCGTT	GCAGAGGCTG	TGCAAAGAAA	GTTGAACCCG	CAGGGAGAAG	14700
CCTTGCCCTCA	AGTAGCAGAA	GAAAGAGTAG	ATTACCAAAC	GGAAGGAAAC	CACAATGAAC	14760
CATAAAATCG	CAATTTTATC	AGATGTTTAT	GGCAATGCGA	CGGCGCTAGA	AGCAGTGATT	14820
GCAGATGCTA	AAAATCAAGG	GGCCAGTGAA	TATTGGCTTC	TGGGAGATAT	TTTTCTTCCT	14880
GGTCCAGGCG	CAAATGACTT	AGTCGCCCTG	CTAAAGGACC	TTCCTATCAC	AGCAAGTGTT	14940

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CGAGGCAATT GGGATGATCG TGTCCTTGAG GCTTTAGATG GGCAATATGG CTTAGAAGAC	15000
CCACAGGAAG TTCAGCTCTT GCGTATGACA CAGTATTTGA TGGAGCGAAT GGATCCTGCA	15060
ACGATTGTCT GGCTACGAAG CTTGCCTTTG CTGGAAAAGA AAGAAATTGA CGGATTGCGC	15120
TTTTCTATCT CTCATAATTT ACCTGACAAA AACTATGGTG GTGACTTGCT AGTTGAGAAT	15180
GATACAGAGA AATTTGACCA ACTGCTAGAT GCGGAAACGG ACGTGGCAGT TTATGGTCAT	15240
GTTCAACAAGC AGTTGCTTCG TTATGGAAGT CAAGGGCAAC AAATCATCAA TCCAGGGTCG	15300
ATTGGCATGC CCTATTTTAA TTGGGAGGCG TTAATAAATC ACCGTTCCCA GTATGCCGTG	15360
ATAGAAGTTG AAGATGGGGA ATTACTCAAT ATCCAATTC GTAAAGTTGC TTATGATTAC	15420
GAAGCTGAGT TAGAATTGGC CAAGTCCAAG GGGCTTCCCT TTATCGAAAT GTATGAAGAA	15480
CTGCGTCGTG ACGATAACTA TCAGGGGCAC AATCTGGAAT TATTAGCCAG CTTAATAGAA	15540
AAGCATGGGT ATGTAGAGGA TGTGAAGAAT TTTTTTGATT TTTTGTAAGA GTTTCCTAAA	15600
ATAGCCAATG CAACTAAAA AAGCGATTTG CTGGTCCAAT CGCTTTTAGT ATATCTTATA	15660
CTCAATGAAA ATCAAAGAGC AACTAGGAA GCTAGCCGTA GGTTGCTCAA AGCACAGCTT	15720
TGAGGTTGCA GATAAAGCTG ACGTGGTTTG AAGAGATTTT CGAAGAGTGT TATTGTAAGT	15780
GAGATTGATC TGGGAGGTAA GAACCACTA GATAGGTATT GCTGAGTTTT TCAAGGGTTC	15840
CGTCTTGATA GAGTTCTTTG AGCGCTTTAT CAAATTGCTC TTTAACTCT TTTTGGTCGC	15900
TTGAGAAAAT GATATAATTG CTGGGGCTAT CTGCAGAAGG TAAATCAACG ACTGAGAGGT	15960
CTAAACCACG GTCCTTGATA ATCTTTTGAA CGGATACCTT GTCAAAAAC AGGAAATCAA	16020
ACTCTCCGTT AGCAAGGTCT AGGATTCGTT TACCAATATC CTCACCAGAA AAATTAATTG	16080
TAGCGGGATT ATCAGTGTGT TTCTGATTCC AGTTATTGAT GAATTGAGCG TTAGAAGTTC	16140
CGGTATCCTC TTGTGTTGTT TTACCAGCGA TCTGGTCAAG AGAAGTCAAA GGATTTTTCT	16200
TGTTGCTGAC AAGGACGAGG GGATTGTTGG AAATTGGAAG CGAGTAAAGG TATTTTTCAG	16260
CACGCTCTTT TGTGTAAGTC AAGTTATTGG CCGCAGCCTG ATAGTGACCA GAATCAAGTC	16320
CTGGGAAGAT GCTCTCCCAG GCGGTTCTTT GGAATTGAAT CTCGTAGTCG CTGAGTTTTT	16380
CATCTACTGC CTTTAAAACT TCGATATCAA AGCCTGTCAG ATTGCCCTTG TCTTCGTAGT	16440
CAAATGGTGG CACGTCGCCA GCTGTAGCAA GGACGATTGT CTTTGTAGCG CTAGTCTCTT	16500
TGGGTGTAGC TTGATTCTCA CAGGCAACCA AAAATGGTAG GATAGCTAGT AATAGGCTAA	16560
ATTTTTTCAT ACTGTCTCCA TTCAAATGTA AAG	16593

(2) INFORMATION FOR SEQ ID NO: 53:

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- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 3510 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 53:

GGGATATCCT TATATCCTTG TTCCTGGAAC CATTGTGGGA ATTGCTCAAC AGTTTTTTTCA	60
CCTTGAATTC CTGGTGCAAT GACAGTAAGA ATTCGAAAT CACGATCTGG TTTCGCCGCT	120
AGTTCCATCA ACTCTGGCAT ACTTTTCTTG CATGGACCAC ACCATGAAGC CCAAACTTC	180
AAGTAAACCT TTTTACCCTT AAAATCAGAT AACTTAACTT CTTTGCCATC CATGGATTGC	240
AATGTGAAGT CTGGAGCATC TTTTCCAACA GCAATTTGTT GTACAGTCGT TTGTTGTTTT	300
GGCTGTTGTG CTGCTTGAGT CTTTTTAGTT TCTTCCTCAC CACAGGCCAT CAATACAACT	360
AATGACAAGA GACTTAAGCC AGCAAACATT ACTTTTTTCA TTTGTCCTCC TTTATTCAAA	420
AATTCCAGCT AGAACATTTA CTTGTCCTAA TAGTAACAAA ATTCCCATTA AAACAATGAG	480
GAAACCACCA ATTTTCTTTA GTAGCATCAT ATGACGCTTG ATTTTACTAA AATATGGCAT	540
GACTAGACCT GAAGCTAGTG CCAATACCAA GAAAGGAAGG GCCATGCCaG AGTGTAATG	600
AGAGTATAAA TCGCTCCTTG CCAAGCGCCA TTGCCTCCAG AAGCCGCAAG TGCTAAAACA	660
GAACTTAAAA CTGGACCAAT ACAAGGTGTC CAACCAAAGC TAAAGGTAAT ACCAAGTAAA	720
AAAGCTGACC AATAACGATT AGAATCTGAT TTTTTAAAGG TAAAACTTTT TTGAACTTCT	780
AATTTCTTCA AATGAAAAAT TTCCATCTGG TGAAGACCCA AAATGATAAT AATAGCTCCC	840
ATGCCATATC, GAAACCAATT TGCATAGAGA ATATGACCAA AGTAACCAGC ACCAAAGCCT	900
AGAATAAAGA AAATGAGAGA GATACCAGCG ATAAAGCAAA GTGTTTCAAT CAAGCCTGAC	960
CAGAGAACCT TTCTCCCAA CAAAGAAAAG CTTTTTGCAC TTTCTTGATC ATCCAATAAA	1020
ATCCCAGCAT AGACTGGCAG AAGAGGAAAA ATACAAGGAG AAAAAAAGGA TAAAACACCT	1080
GCTAGAAAAA CAGAGATTAA AAATACTATC GTTTCCAATA AAGAACCAAC TTTCTTAATA	1140
ATTCTAATCC TATTTTACTA TATTCAATTT TATTTGTAAG CTTTCTGCTA CGCAAAATCG	1200
TATCGGGCAC TATTGGACCA ATCTTTTCTT TTGCTAGTCA AGGCGGATCT TATCCCCCAA	1260
AATAGCCAAA AAGCAACGAC AAGGATTACT CATCGCTGCT TTTGTGAACG AAAATGTCCT	1320
TTAGGTCTGA CATTTTCATA ATCATGTTTT ACTTGAGTTT GTCAAGGATT GCTTTAAGCT	1380
CCTCTACTAG TTTAGTTTCT GTCTCTGCTG AGCCATTTTC TTCTTTCACG AAATCAAGGG	1440
TTTCTTGAG AAGGTTTTGG GCTTTGGCAA GGACTTTTTT ATCCGCTTTT TCTGCATCTA	1500

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GCTGTCCTAG AACCTTGATC AATTCCGTGC TTAATTGCTG GATTTCTGAC TCTTTCTTAC	1560
GGCGAATCAG CCAGAAGGCA ATCACGCCTA GGAGGGCAAG TAGACTGACC ACAATCACTC	1620
CTGCCGGAAC TGAGTTTGTT TCAGTCATCT TATCTGAATC CTTACTATCT TCCGTTCCCTT	1680
GTTTTGCATC CTTCTTGTC TGTGCAGGCT TGCTGTCGCT AGCATTTGCT TTCACATCTT	1740
TGAGAGAGTC CAAGGCAGCC CAGCCTTCAC AGACTCTACT GCAGTATGCA GACCTTACTC	1800
TGTCAAGGCA CTATCTTCCG GAGCTTTTTG AGCATCTAGG AGGACAGCCT TGGTTGCATC	1860
GATTTTCGGA TCAGATACTG TTGCCAAAGC TTTCAAGCGT TGGTCTAACT CTTGACTCAA	1920
GGCACGAAGT TCAGACTTGT CAACTTGCTC TTGAGCTTGT GTGCTCGTTG AGCTAGCCGA	1980
AGCGCTTGCT ACCACTCTAG GATCTTGAGT CGGAGCTGAG CTTGGAGCTG GGACAGGGCT	2040
TGCAGGTTGA CTAGGAACAG TTATGGTATA TTGAACTAG AATAGTACAT ATGGACTTCT	2100
AAAACATTGT TAGAATTCGA TTTTACTGTC CTGATCGATT TGTCCATATC TTATTTTATT	2160
TTACTATAAT AACCGATGGT GTGGTTAATG TTGGTAAGAG AAACCTTCTGA AACCAAGCTT	2220
CAAAAAAGTC GCTCGTCATC GTCTCTTCGT AAGTCATTGG AGCGATTAAT TCACCATTG	2280
TTAGACCTGC AACCAAAGAA ATCCTCTGAT ATCTTCTTCC AGATACTTTG CCTCTTATTA	2340
ACTGACCTTT TAATGAGCGA CCATATTCTC GATAAAAATA AGTATCGAAT CCTGTTTCGT	2400
CAATCTAAAC AGGTGCTAGG TGCTTTAAAC TATTAAAATT CTTAAGAAAT AAGGCTACTT	2460
TTTCTGGGTC TTGTTTCATAG TAGGTGTGGT TCTTTTTTTC GAGTGTAGCC CATAGCTTTG	2520
AGCGCATAGT GGATGGTAGT TGGATGACAG CCAAATCAG AAGCTATTTT AGTCAAATAA	2580
GCCTCTGGAT TGTCAGTAAG ATAGTTTTTA AGTCTATCTC TATCAACTTT TCTTGGTTTT	2640
GTTCCTTTTA CTTGGTGGTT TAGCTCTCCT GTTTTCTCTT TTAGCTTTAA CCAGCCATAA	2700
ATGGTATTAC GTGAGATTTG GAAAACGTGT GATGCTTCTG TTATACTACC TATTCGCTCA	2760
CAATAAGAGA GAACTTTTTT ACGAAAATCT ATTGAATATG CCATAAGAAG ATTATACCAC	2820
ATTGTGTACT ATTTTGGTT CATTTCACTA TAACACAAAA TAGATTATTA TTACATAACA	2880
AAAAAGAGGT CTAAACCTCT TAACTCAATT ACTCCGCCAG TAGGACTCGA ACCTACGACA	2940
TCATGATTAA CAGTCATGCG CTACTACCAA CTGAGCTATG GCGGATTAAA GCTAAGCGAC	3000
TTCCCTATCT CACAGGGGGC AACCCCAAC TACTTCCGGC GTTCTAGGGC TTAACCTCTG	3060
TGTTTCGGCAT GGGTACAGGT GTATCTCCTA GGCTATCGTC ACTTAACTCT GAGTAATACC	3120
TACTCAAAAT TGAATATCTA TTCAATTTAA GAAAACCGTT CGCTTTCATA TTCTCAGTTA	3180
CTTTGGATAA GTCCTCGAGC TATTAGTATT AGTCCGCTAC ATGTGTCGCC AACTTCCAC	3240

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TTCTAACCTA TCTACCTGAT CATCTCTCAG GGCTCTTACT GATATATAAT CATGGGAAAT	3300
CTCATCTTGA GGTGGkTtCA CACTTAGATG CTTTCAGCGT TTATCCCTTC CCTACATAGC	3360
TACCCAGCGA TGCCTTTGGC AAGACAACTG GTACACCAGC GGTAAGTCCA CTCTGGTCCT	3420
CTCGTACTAG GAGCAGATCC TCTCAAATTT CCTACGCCCCG CGACGGATAG GGACCGAACT	3480
GTCTCACGAC GTTCTGAACC CAGCTCGCGT	3510

(2) INFORMATION FOR SEQ ID NO: 54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20986 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 54:

CGGAGAAAAA CATGGCTAAG TCAAACCTTG AAAAAGTAGA ATCAGTTGTT GGCTGGGTTC	60
GTGATAAGAA AATCACAGGC TACCGTATCT CTAAAGAAAC GAATGCGCGT GAAATGTCTA	120
TCATTGCTCT GGCGCAGGGT CGTGCAAAAG TAAAAAATAT TTCATTTGAA ACAGCCCTAG	180
GCCTAATTGA TTTCTATGAA AAAAATTATG AAAAATTGTA AGATTAATCT TTGGATAACG	240
GCGGATTCTT GACCTTCAAG TAGTAGAGAT AGAGAATCTG CCTTTTCATT TTGAGGACAG	300
CAAAAAGACT GCACGGTTGA TGCAGCCTTT TCTTTTATT TGAGATAGCG TTGAAGGAAC	360
TCTTTTGTTT GGTCTTCTTT AGGATTGGTG AAGAGGTCTT CTGGTTTACC TTCTTCAGCG	420
ATCACGCCCT TATCCATAAA GATAACACGG TGAGAGACAT CACGGGCAAA TTCCATTTC	480
TGGGTACGA CAATCATGGT CAAGCCTTCC TGAGCCAGGT CCTGCATGAT TTTGAGGACT	540
TCTCCAACCA TTTCTGGATC GAGAGCTGAT GTTGGTTCAT CAAAGAGAAT AGCGTCCGGA	600
TTTATGGAGA GGGCACGAGC GATGGCCACA CGTTGTTTTT GACCACCTGA GAGTTGTTTT	660
GGTTTGGCTT GCCAGTAGCG TTCTCCCATG CCGACCTTTT CCAGGTTTTT TTTGGCAATC	720
TTTTTCAGCTT CTGTGCGTTC GCGTTTTAGG ACAGTTGTCT GAGCGACGAT TGTGTTTTCA	780
AGAACATTGA GATTTTCAAA GAGGTTAAAG GATTGGAAAA CCATCCCCAA CTTTTCACGG	840
TATTGCGTGA GGTCATAGCC TTTTTCGAGG ACGTTTTGTC CATGATAAAG GATTTGTCCA	900
TCAGTTGGTG TTTCAAGTAG GTTAATGGAG CGTAGGAAGG TCGATTTTCC GCTTCCAGAG	960
CTTCCGATGA TAGAGATGAC CTCTCCCTTG TGGACAGTGA GTGAAATGTC TTTTAGCACT	1020
TCGTTTTGTC CATAGGATTT TTTGAGGTGT TTAATTTCAA GGATTGCTTG TGTCATTATT	1080
TCAAATCCTC CGTTTGCATT TGGTTAGCAC CTGTAGTGTA GGTATCCATG TCCATTCTGC	1140

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GCTCGATAAA	GCGTAGGATA	CGTGTTACGG	TGAAGGTGAG	GACAAAGTAA	ATCACGGCGA	1200
TGATTGTAAA	TGTCTGGAAG	TATTGATAGG	TTTGTGTTGC	CACGGTATTT	CCTGAGAAAT	1260
AAAGTTCGAC	AACAGAGATA	ACGTTCAATA	CAGATGTATC	TTTGATATTG	ATGACAAATT	1320
CATTACCAGT	TGCAGGTAGG	ATGTTACGGA	CTACCTGAGG	TAGGACAATC	TTACGCATGG	1380
TCTGGTTATG	GGTCATACCA	AGAGCAGTCG	CAGCTTCAAA	TTGTCCCTTG	TCAACTGCTA	1440
GGATACCACC	ACGGACGATT	TCAGTCATGT	AGGCACCGGT	ATTGATTGAA	ACGATGAAGA	1500
TAGCAGCCAG	TGTACGGTCA	AGGTTGATCC	CGAAAGCTTG	GGCAGTTCCA	TAGTAGATAA	1560
CCATCGATTG	AACAATCATT	GGCGTACCAC	GGAAAATTTT	AATGTAGACA	TTGAGAACCC	1620
AGCCGACTAG	TTTTTGTAGG	CCGTAAATGA	CTTTGTTTTT	AGAGAGAGGA	GCAGTACGGA	1680
AGACACCAAT	GGCAAGTCCA	ATAATGAGAC	CTATGATGGT	TCCGACGATA	GAGATTAAAA	1740
GAGTGATACC	AGCACCACGC	AAGAGTTGTT	GCCAGTTTTT	AGAAAGAATT	TTAGCAACTT	1800
GGCTAAAGAA	ACTACTGCTA	GTCTCTTCAG	TTGTTGTAGC	TTCGGCAGGT	TGTTCCCTGA	1860
TCATACGATC	CATCAAGGCA	ACTTGGTCAT	CTTTTGAAAT	GGTTTCAATG	CTGGCATTGA	1920
TTTGGCTAAT	ACGATTGTCA	TTTTTACGAA	GCCCGATAGC	GATAGCTGTA	TCTTCTTCCC	1980
CAGTTTTGAA	ACCAGGTTCT	ACTTGAATCA	TCTTGAACCT	AGAGTTCGCA	GCTTCAGCAG	2040
TCAGTGCTTC	TGGACGTTCA	GAAACATAAG	CATCAATGAC	ACCAGCCTCA	AGAGCTTGTC	2100
GCATTTGAGC	GAAGTCTCCC	ATGGCTGTTT	CTTTTTTAGC	ACCTGGGATT	TGTGCAATCA	2160
AGTTATAAAG	GTAGACCCCT	TGTTGAGAAG	TGATTTTTGC	ACCGTTAAAG	TCATCCAAAG	2220
ATTTAGCACT	TGCGTAGGCA	GAATCTTTTT	TGACAAGCAA	AACTGGTTCG	CTAGTATAGT	2280
AACTGCTCGA	AAAGGCAATT	TCTTGTTTTG	GTTCTGCAGT	TGGACTCATA	CCTGCGATAA	2340
TCATGTCAAT	CTTACCAGAA	GTAAGGGCAG	GGACTAGACC	TTCCCACTTG	GTTTTAACAA	2400
CCAAAGGTTT	TTTACCTAAG	TCCTTAGCGA	TTTTCTTGGC	GATTTGAACA	TCGTATCCGT	2460
TGGCATACTG	ATTGGTCCCA	TCGATTTTGA	CAGCTCCGTT	GCTATCATCA	TCCTGGGTCC	2520
AGTTAAAGGG	AGCATATGCT	GCTTCCATAC	CGATGCGTAA	ATATTCATCG	GCTTGAGCAA	2580
CATTGACAAG	TCCTAGCATC	AGCAAGAGAC	TTGTGAAAAT	AGATAAGTAY	ATGTGGCTCA	2640
TGATTTCTCC	TATTCTGATC	TATTAAAAAA	TAAGTGTCTC	CTATTTTATC	GAAAAATGCG	2700
TAATTTTTCA	ACATAAGTAA	GTCTTTACTT	ACGAAAAAAT	GCTATAATGA	TAAGAAAGAT	2760
AAAAAGGGGG	CTTAGTTGAT	GAAAAAAACT	TTTTTCTTAC	TGGTGTTAGG	CTTGTTTTGC	2820
CTTCTTCCAC	TCTCTGTTTT	TGCCATTGAT	TTCAAGATAA	ACTCTTATCA	AGGGGATTTG	2880

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TATATTCATG	CAGACAATAC	GGCAGAGTTT	AGACAGAAGA	TAGTTTACCA	GTTTGAGGAG	2940
GACTTTAAGG	GCCAAATCGT	GGGACTTGGA	CGTGCTGGTA	AGATGCCTAG	CGGGTTTGAC	3000
ATTGACCCTC	ATCCAAAGAT	TCAGGCCGCG	AAAAACGGTG	CAGAACTAGC	AGATGTGACT	3060
AGCGAAGTAA	CAGAAGAAGC	GGATGGTTAT	ACTGTGAGAG	TCTATAATCC	AGGTCAGGAG	3120
GGCGACATAG	TTGAAGTTGA	CCTCGTCTGG	AACTTAAAAA	ATTTACTTTT	CCTTTATGAT	3180
GATATCGCTG	AATTAAATTG	GCAACCTCTG	ACAGATAGTT	CAGAGTCTAT	TGAAAAGTTT	3240
GAATTTCATG	TAAGGGGAGA	CAAGGGGGCT	GAAAAACTCT	TTTTCCATAC	AGGGAAACTT	3300
TTTAGAGAGG	GAACGATTGA	AAAGAGTAAC	CTTGATTATA	CTATCCGTTT	AGACAATCTT	3360
CCGGCTAAGC	GTGGAGTTGA	GTTGCATGCC	TATTGGCCTC	GGACCGATTT	TGCTAGCGCT	3420
AGGGATCAGG	GATTGAAAGG	GAATCGTTTA	GAAGAGTTTA	ATAAGATAGA	AGACTCGATT	3480
GTTAGAGAAA	AAGATCAGAG	TAAACAACCTC	GTTACTTGGG	TCCTCCCTTC	GATCCTTTCC	3540
ATCTCCTTGT	TATTGAGTGT	CTGCTTCTAT	TTTATTTATA	GAAGAAAGAC	CACTCCTTCA	3600
GTCAAATATG	CCAAAAATCA	TCGTCTCTAT	GAACCACCAA	TGGAATTAGA	GCCTATGGTT	3660
TTATCAGAAG	CAGTCTACTC	GACCTCCTTG	GAGGAAGTGA	GTCCCTTGGT	CAAGGGAGCT	3720
GGAAAATTCA	CCTTTGATCA	ACTTATTCAA	GCTACCTTGC	TAGATGTGAT	AGACCGTGGG	3780
AATGTCTCTA	TCATTTCAGA	AGGAGATGCA	GTTGGTTTGA	GGCTAGTAAA	AGAAGATGGT	3840
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CTTTCCAATT	TGTTTGCGGA	TTACAAGGTA	TCTGATAGTC	TTTATCGTAG	AGCCAAAGTT	3960
TCTGATGAAA	AACGGATTCA	AGCAAGAGGG	CTTCAACTCA	AATCTTCTTT	TGAAGAGGTA	4020
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TATCGTCCTT	TAAGTGGTGG	GGAAAAGGCC	TTGCAAGTGG	GATGGGTGC	CTTGACTATC	4140
CTGCCCCTAT	TTATCGGATT	TGGTTTGTTC	TTGTACAGTT	TAGACGTTCA	TGGCTATCTT	4200
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AAGCTTCGAC	TAGATAATCG	TGATGGTGTT	CTAAATGAAG	CGGGAGCTGA	GGTCTACTAT	4320
CTCTGGACCA	GTTTTGAAAA	TATGTTGCGT	GAGATTGCAC	GATTGGATCA	GGCTGAACTG	4380
GAAAGTATTG	TGGTCTGGAA	TCGCCTCTTG	GTCTATGCGA	CCTTATTTGG	CTATGCGGAC	4440
AAGGTTAGTC	ATTTGATGAA	GGTTCATCAG	ATTCAAGTGG	AAAATCCAGA	TATCAATCTC	4500
TATGTAGCTT	ATGGCTGGCA	CAGTACGTTT	TATCATTCAA	CAGCACAAAT	GAGCCATTAT	4560
GCTAGTGTCG	CAAATACAGC	AAGCACCTAC	TCTGTATCTT	CTGGAAGTGG	AAGTTCTGGT	4620
GGTGGCTTCT	CTGGAGGCGG	AGGTGGCGGC	AGTATCGGTG	CCTTTTAAAG	AGAGCTACCA	4680

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TAGACTGAAA	AAGTATGATA	TAATGGAAGA	TAGAAAAAAG	ACAAACTATA	AGAAAAGTCA	4740
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CGGCAAAAAG	CCCTTGAAAA	AGTCCATTTT	TTCAAAGGTA	ATCCTGTGTT	AATTTTCAGAA	4860
ATTACATCAC	TTTTTGTTTCG	TCAAATGGCA	GCTCTTTTTT	AGGATATAAA	ACAGGGTTCG	4920
GATAAGTTTT	TTTGCAAGGT	GGATGATGGC	TACATTGTAA	TGTTTTTCCTT	ATTCTAACTT	4980
AGTCTTAAGA	TAGGCCTTAG	AAGCAGGTGA	AAAGCGAGGG	CATGCTTTGG	CAGCTTGTAT	5040
GAGTGCCAC	CGCAGATGAG	GGGAACCCCG	TTTGACCATT	CTTCCAGCTA	AATCAATCTG	5100
ACCTGACTGA	TAAATAGAAG	AATCCAGTCC	AGCGAAAGCT	TGTAATTGAG	CAGGATTATC	5160
AAAGGCATGA	ATATTTTCGAA	TCTCGGCTAA	AATGACCGCC	CTAAACGATC	CCCAATCCCA	5220
GTAACCGTCG	TGATGACCGA	GTTGAACTCA	GCCATCGAGT	CATTGATACA	TGTTTCCGCC	5280
TTGTCAATGA	GCCTCTTGTA	ATGCTTGATG	ATTTCGAATT	CACGAGCAGG	AGATGTTGTT	5340
CCGATAGAAC	GAGGTGCGAC	TGAGAGGATA	TCCTGAATTT	TAGAAGCGGT	CAATCGCTTA	5400
ATTTCTATCA	GCTTATCAAA	TCCTGCCTCA	ATCCTTTTCT	GAGGATTAGG	GTAGCGTGTC	5460
AAGAGTTGGT	AGGTATATTC	TGAATGCTTT	CCAACGATTT	TATCCAATC	AGGAAAGATG	5520
ATATCAAGAC	AACGAGTGTA	TTGTACTTTC	CAATCAGACT	GTTTTTCTTG	AGACGATGAA	5580
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TGGGGTCAGA	AAGAAGTTTA	AGAGCGATGC	CATGAGCGTC	TTTCTTATCC	GTTTTAGTCT	5700
TGCGAAGTGA	TAATGATTTG	GCAAATTCCT	TGATGAGCAA	AGGATTGTAG	GTGTAAACTT	5760
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CTTTATTATT	TGAAAAAGTG	AGTGGTTTAA	GAACAGTTTT	TCCTGGAACA	TTCAAGGCTG	5940
TAACATCGTG	TTTATTTTTA	GCGATATCAA	TGCCTACATA	AAGCATGGGA	GTACCTCCAG	6000
ATATAGTATT	TCAAGTCTAC	TTGGTTATCC	ACGAATTTTT	TGCCTTGTTA	CCTTAGACGA	6060
GATCAAACGT	CTATGCGTTA	TCAAACCTCAT	TACCAATTGA	AACAAAAGCT	GTGGTTAGAG	6120
CCTTTCGGAA	ATCGTCAAGC	GATTGGAGGA	AATGAACTAA	TCCATAGTGG	CTTATTCCAA	6180
GTATACCACT	TGGGCTTTGG	CAGTAGCTAA	CTGCGCTAAA	TATAATATAG	GGAGTAATCT	6240
ATGTATCTTA	TTGAAATTTT	AAAATCTATC	TTCTTCGGAA	TTGTTGAAGG	AATTACGGAA	6300
TGGTTGCCGA	TTTCCAGTAC	AGGTCACCTG	ATTTTAGCAG	AGGAATTCAT	CCAATACCAA	6360
AATCAAAATG	AAGCCTTTAT	GTCCATGTTT	AATGTCGTGA	TTCAGCTTGG	TGCTATTTTA	6420

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GCAGTTATGG	TGATTTATTT	TAACAAGCTC	AATCCTTTTA	AACCGACCAA	GGACAAACAG	6480
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GGTGTCTTTA	AATTTGATGA	TTGGTTTGAT	ACCCACTTCC	ATAACATGGT	TTCAGTTGCT	6600
CTCATGTTGA	TTATCTACGG	GGTTGCCTTC	ATCTATTTGG	AAAAGCGCAA	TAAAGCGCGT	6660
GCTATCGAGC	CAAGTGTAAC	AGAGTTGGAC	AAGCTTCCTT	ATACGACCGC	TTTCTATATC	6720
GGACTCTTCC	AAGTTCTTGC	TCTTTTACCA	GGGACTAGCC	GTTTCAGGTGC	AACGATTGTC	6780
GGTGGTTTGT	TAAATGGAAC	CAGTCGTTCA	GTTGTGACAG	AATTTACCTT	CTATCTTGGG	6840
ATTCCTGTTA	TGTTTGGAGC	TAGTGCCTTA	AAGATTTTCA	AATTTGTGAA	AGCCGGAGAA	6900
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AGCATGGTGG	CTATTCGCTT	CTTGACCAGC	TATGTGAAAA	AACACGACTT	CACCCTTTTT	7020
GGTAAATACC	GTATCGTGCT	TGGTAGTGTT	TTGCTACTTT	ACAGTTTTGT	CCGTTTATTT	7080
GTATAAGAAA	AACCTTGAAG	GGGCAACTCT	TCAAGGTTTT	ATACTCTTCG	AAAATCTCTT	7140
CAAACCGCGT	CAGCTTTATC	TGCAACCTCA	AAACAGTGTT	TTGAGCAGCh	CTGCGGCTAG	7200
CCTCCTAGTT	TGCTCTTTGA	TTTTCATTTGA	GCTTTAAAAT	CCAGTCATGG	TAATCCCCAA	7260
TAGGCGGACA	CCTCTTTCTT	TCTTGCTTAA	TTCTTCATAG	AGTTGCAGGG	CTATTTGGCT	7320
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TATTAGGGTT	ACCTCAGGAA	CTTCAAGTAA	ATCAGCACCA	GTAAAAACGC	CCATTTGATG	7680
AAGACGTTCT	ACTGTCTTTT	TTCCTACTCC	ATGAAATTTG	GAAATATCCA	TTTGTTTGAG	7740
AAAATCCTCA	GCCTGTTTCA	GTAGAATCAC	TGTCAAACCA	TGTGGTTTTT	GATAATCACT	7800
CGCCATTTTA	GCTAAGAATT	TGTTGTAAGA	AACGCCTGCG	GAAGCAGTTA	GATGGAGTTC	7860
TTGCCAGATA	TCTTTTTGAA	TGAGGCGAGC	AATTTTGACC	GCTGACTTGA	TACCGAGTTT	7920
ATTTTCTGTC	ACATCCAAAT	AGGCTTCGTC	AATGCTCATG	GGTTCAATCA	AATCTGTATA	7980
GCGCTTAAAA	ATAGCTCGAA	TCTGGAGTCC	CACAGACTTG	TATTTCTCAT	AATCCCTGA	8040
GATAAAGACA	GCCTGGGGAC	AACGTTTATA	AGCTTCCTTG	GAATCATGG	CAGAAATGGAC	8100
ACCAAAAGCT	CTTGCCCTCAT	AACTACAGGT	AGAAACGACT	CCCCGTCCAC	CTGTTTGCCG	8160
AGGGTCGCTT	CCAATAATGA	CAGGTTTTCC	TCTGAGTTTA	GGATTATCCC	TGATTTCCAC	8220

TGCAGCAAAA	AAGGCATCCA	TGTCAATATG	GATGATTTTT	CTTGACAAAT	CATTTAACAA	8280
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AAAAAAGAAA	AAAGGACTTT	ATTTTTTTCAA	AAATATAATA	CAGTTTGAAA	TAAAATATAG	8520
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TATGGTATAC	TTGTCTTATG	AATGTAACAG	ATGACTGTTA	CTAGAAAAAA	GAGGACATTA	8640
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TCAAAGGCGT	AGATTGGAAA	GAAAAAGCAA	GTGTATCACG	ATTTGTACAA	GCTAACTACA	8760
CACCTTATGA	TGGAGACGAA	AGCTTCCTTG	CAGGACCAAC	AGAGCGTTCA	CTTCACATCA	8820
AGAAAATTGT	AGAAGAAACT	AAAGCACACT	ACGAAGAAAC	TCGTTTCCCA	ATGGACACTC	8880
GTCCAACATC	TATCGCTGAT	ATCCCTGCTG	GATTTATCGA	CAAAGAAAAT	GAAGTTATCT	8940
TCGGTATCCA	AAACGATGAA	CTCTTCAAAT	TGAACTTCAT	GCCAAAAGGT	GGTATCCGTA	9000
TGGCTGAAAC	TACTTTGAAA	GAAAAATGGAT	ACGAACCAGA	CCCAGCTGTT	CACGAAATCT	9060
TCACTAAATA	TGTAACAACA	GTTAACGACG	GTATTTTCCG	TGCCTACACT	TCAAATATTC	9120
GTCGCGCTCG	TCACGCACAC	ACTGTAACTG	GTCTTCCAGA	TGCATACTCA	CGCGGACGTA	9180
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TAAATGACTG	GAATGCAATC	AAAGAAATCG	ATGAAGAAAC	AATCCGTCTT	CGTGAAGAAG	9300
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TGGCTGTCTG	CCGTGTGATT	AACGGTGCTG	CTACATCTCT	AGGTCGTGTA	CCAATCGTAT	9480
TGGACATCTT	TGCAGAACGT	GACCTTGCTC	GTGGTACATT	TACTGAATCA	GAAATCCAAG	9540
AATTCGTTGA	TGATTTTCGTT	ATGAAACTTC	GTACAGTTAA	ATTTGCTCGT	ACAAAAGCTT	9600
ATGACCAATT	GTACTCAGGT	GACCCAACCT	TTATCACAAC	TTCTATGGCT	GGTATGGGTA	9660
ACGACGGTCG	TCACCGTGTT	ACTAAGATGG	ACTACCGTTT	CTTGAACACT	CTTGACAACA	9720
TCGGTAACTC	ACCAGAACCA	AACTTGACAG	TTCTTTGGAC	TGACAAATTG	CCATACAACT	9780
TCCGTCGCTA	CTGTATGCAC	ATGAGCCACA	AACACTCTTC	TATCCAATAC	GAAGGTGTAA	9840
CAACAATGGC	TAAAGACGGA	TATGGTGAAA	TGAGCTGTAT	CTCATGCTGT	GTGTCTCCAC	9900
TTGATCCAGA	AAATGAAGAA	CAACGCCACA	ACATCCAGTA	CTTCGGTGCT	CGTGTAACG	9960

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TTCTTAAAGC	CCTTCTTACT	GGTTTGAATG	GTGGTTACGA	CGATGTTTAC	AAAGACTACA	10020
AAGTATTTGA	TATCGAACCA	ATCCGTGACG	AAGTTCTTGA	ATTTGAATCA	GTAAAGCGA	10080
ACTTTGAAAA	ATCTCTTGAC	TGGTTGACTG	ACACTTACGT	AGATGCCTTG	AACATCATCC	10140
ACTACATGAC	TGATAGGTAC	AACTACGAAG	CTGTTCAAAT	GGCCTTCTTG	CCAACTAAAC	10200
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AAACAATCGG	TGACTACCCA	CGCTGGGGTG	AAGATGACCC	ACGTTCAAAC	GAATTGGCAG	10380
AATGGTTGAT	CGAAGCTTAC	ACAACCTCGTC	TACGTAGCCA	CAAACATATC	AAAGACGCAG	10440
AAGCTACAGT	ATCACTTTTG	ACAATCACAT	CTAACGTTGC	TTACTCTAAA	CAAACCTGGTA	10500
ACTCACCAGT	TCACAAAGGT	GTATACCTCA	ACGAAGATGG	TTCTGTGAAC	TTGTCTAAAC	10560
TTGAATTCTT	CTCACCAGGT	GCTAACCCAT	CTAACAAAGC	TAAAGGTGGT	TGGTTGCAAA	10620
ACTTGAACTC	ACTTTCTAGC	CTTGACTTTA	GTTATGCAGC	TGACGGTATC	TCATTGACTA	10680
CACAAGTATC	ACCTCGCGCT	CTTGGTAAGA	CTCGTGATGA	ACAAGTTGAT	AACTTGGTAA	10740
CAATTCTTGA	TGGTTACTTC	GAAAACGGTG	GACAACACGT	TAACTTGAAC	GTTATGGACT	10800
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GAGAGAGTTT	CCGACTATCT	TTTAGGATAA	ATTTCCAGTA	ATATTTAAGA	GCTCTGTATT	11580
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TCATGTGTTG	GACAATGTGG	AAACGATCGA	GAACAATTTT	AGCATTGGGA	AATAATTTCT	11700
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CTTCTTTCGA	GTACTTGAAG	AAATGATTTC	GGATGGTTGT	TTGACGTCTG	TTATCAAGAA	11820
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AGGAGAATTC	ATCCCAGGAG	AGGATTTCAG	GCAAAGTGGT	GTAATCCTCT	TGGAAATGAA	11940
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CGATAAAAGG	GATTTTAGAA	GGCTTTTGGA	AGTCGTATTT	GATTTGTTTT	CCTTTACAGT	12240
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TGATGTGTTT	CATAAGATAC	TTTCTAATGA	GTTGTTTAGG	CGCTTTTCAT	TATAAGTCTT	12420
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AGGCAACTTT	GTCAGTAAAA	TTCCGTAAAA	TAATGGACTT	TATTAAGTTT	ACATCTGCTT	12960
GATTATTTAA	AATGATAAAA	ATCGGGATAG	CAGGTAGTGA	GGAAAAGATG	GTTTCTGTCA	13020
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TCATCCACTC	TTGAACAATT	GCTTTCGAAA	TATGATACAG	TGGCTTGTCG	CTTTCAATCC	13140
CATAATGTTC	GTAATAATTA	TAATAGGGAA	CTAGATTTTG	TAAACCAAAC	AAAAACGTTC	13200
TTGTTAAGAA	AGTCAGTGCT	GTAAAAAAG	AAAGAGAATT	CGAAATGTCA	TTTCCTAAGA	13260
TATTCTTGAA	CTTGATAGT	AGATGCTTTC	CTCTTGATAG	CTGAAGAATC	AGTTGAATAG	13320
TATGAGTCTT	TTTTTCTTGA	TTCCATTTGT	CCTTGGAATA	CGAAGAATTA	GCAGAACAAT	13380
AAACCAAAAA	GATATAATCC	AGTTCTTCCT	GAGTAAAAGT	CATGTTGGCA	TGTGGCTCTA	13440
AGTAAGTTTG	GCAATGTTCC	ATCAAAATCG	GATACATAAA	GAGGTTTTTT	AATTTTTCAA	13500

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ACTCTTTGGA	CTCAGGGAAC	TCAAGTGGA	ATTCCCGACG	TTTCCAAGTG	AGTGCCACTA	13560
GTATGCTAAA	ATGAACATAC	TCGTCAGGTG	TGATTTCTAA	CAGTTCATGA	CTGAGTTGAG	13620
AATTAGACTG	CACAATCATA	TGTGTGACCC	AATCCATACT	TCCATCATTC	AAATCATAAA	13680
TCTCAATACC	AAAATGAAAC	TGGAGGAGTG	CAATTAAAAA	ACGAATGCGA	TATTCAGGAC	13740
CAACTACTTG	ATTTTTCACA	AGGTCCAAAC	CTACTGAACG	TAGTAACAAG	CCACACTTTT	13800
GTCGTACGCG	GTAGCCTGTT	GCGATGGAAA	TATACTCTTT	TTGTGTAAAT	TCGTTAAAGC	13860
TTTGATTACC	TTGTAGTAGA	AAGAAGCGGA	GTATTTTAA	AATAGTTGAT	TGGTTATAAA	13920
GCTGATGGAA	GTAATAATTC	GTTTGATGAG	AATGGTGTTT	GATTAATTGA	ACTTGTTGCG	13980
TATCTAAATT	AAATGTCAAC	TCTTCCTCGA	ATGTTTCTTG	TAATTCCTGC	AAAATGCTTA	14040
GGAGACTTTT	AGATTGTAAT	GAAGTTAAAG	TAGACAGTTC	ATCTAGTTCA	ATAGACCGAA	14100
TATCCAATAA	TATATTTAAA	ATGGTAATTT	TATCTGTAAT	TCTTTTTC	ATGTATTTGT	14160
TTAGCATAGT	TACCGAATCT	TAGTTGCATA	TAGATAATTT	TAATTATTAT	AATACAAAAG	14220
AAACTAATTG	TCTTGTCAAA	AAGGTTGTGG	AATTTCCGAC	TTTATTGATA	AAACAGCATG	14280
TAATAAAAGG	CATTTTAAAG	ATAGTAATGA	GTATTGGTGG	AGTTTATGG	CTTATTTTTT	14340
TTATTAGAAA	ATATTTTTTT	ATCAAATATT	GTCGTTCTAT	AAAAAATAT	GTGATAAAAA	14400
TATCTATTGT	GATGGAAGTT	GTTTTAATTT	ATACTAGGAT	AGTTAATAGT	AATACTATAC	14460
TATACTATAT	TGTATACAAG	TGTGTCATTG	CCAGGTTGAG	AAGATAGCTA	TAACGCACCT	14520
TTATACGCTT	TTGCTACGTT	TGTTAGTGAA	CGGATTAAC	CAGTGAGATA	AATTTTATCA	14580
GAACATAAGT	AATCCGTTTC	TTCGTGTATA	CAGATTGAAA	GTACCTATGA	ATCATAGAAG	14640
GATTAACCTG	TTCTATGAAT	AATGCTTAAC	AGGGAGACAC	ACATGAAAAA	AGTAAGAAAG	14700
ATATTTTCTG	AGGCAGTTGC	AGGACTGTGC	TGTATATCTC	AGTTGACAGC	TTTTTCTTCG	14760
ATAGTTGCTT	TAGCAGAAAC	GCCTGAAACC	AGTCCAGCGA	TAGGAAAAGT	AGTGATTAAG	14820
GAGACAGGCG	AAGGAGGAGC	GCTTCTAGGA	GATGCCGTCT	TTGAGTTGAA	AAACAATACG	14880
GATGGCACAA	CTGTTTCGCA	AAGGACAGAG	GCGCAAACAG	GAGAAGCGAT	ATTTTCAAAC	14940
ATAAAACCTG	GGACATACAC	CTTGACAGAA	GCCCAACCTC	CAGTTGGTTA	TAAACCCTCT	15000
ACTAAACAAT	GGACTGTTGA	AGTTGAGAAG	AATGGTCGGA	CGACTGTCCA	AGGTGAACAG	15060
GTAGAAAATC	GAGAAGAGGC	TCTATCTGAC	CAGTATCCAC	AAACAGGGAC	TTATCCAGAT	15120
GTTCAAACAC	CTTATCAGAT	TATTAAGGTA	GATGGTTCGG	AAAAAACGG	ACAGCACAAG	15180
GCGTTGAATC	CGAATCCATA	TGAACGTGTG	ATTCCAGAAG	GTACACTTTC	AAAGAGAATT	15240
TATCAAGTGA	ATAATTTGGA	TGATAACCAA	TATGGAATCG	AATTGACGGT	TAGTGGGAAA	15300

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ACAGTGTATG	AACAAAAAGA	TAAGTCTGTG	CCGCTGGATG	TCGTTATCTT	GCTCGATAAC	15360
TCAAATAGTA	TGAGTAACAT	TCGAAACAAG	AATGCTCGAC	GTGCGGAAAG	AGCTGGTGAG	15420
GCGACACGTT	CTCTTATTGA	TAAAATTACA	TCTGATTCAG	AAAATAGGGT	AGCGCTTGTG	15480
ACTTATGCTT	CCACTATCTT	TGATGGGACC	GAGTTTACAG	TAGAAAAAGG	GGTAGCAGAT	15540
AAAAACGGAA	AGCGATTGAA	TGATTCTCTT	TTTTGGAATT	ATGATCAGAC	GAGTTTACAA	15600
ACCAATACCA	AAGATTATAG	TTATTTAAAG	CTGACTAATG	ATAAGAATGA	CATTGTAGAA	15660
TTAAAAAATA	AGGTACCTAC	CGAGGCAGAA	GACCATGATG	GAAATAGATT	GATGTACCAA	15720
TTCGGTGCCA	CTTTTACTCA	GAAAGCTTTG	ATGAAGGCAG	ATGAGATTTT	GACACAACAA	15780
GCGAGACAAA	ATAGTCAAAA	AGTCATTTTC	CATATTACGG	ATGGTGTCCC	AACTATGTCG	15840
TATCCGATTA	ATTTTAATCA	TGCTACGTTT	GCTCCATCAT	ATCAAAATCA	ACTAAATGCA	15900
TTTTTTTAGTA	AATCTCCTAA	TAAAGATGGA	ATACTATTAA	GTGATTTTAT	TACGCAAGCA	15960
ACTAGTGGAG	AACATACAAT	TGTACGCGGA	GATGGGCAAA	GTTACCAGAT	GTTTACAGAT	16020
AAGACAGTTT	ATGAAAAAGG	TGCTCCTGCA	GCTTTCCCAG	TTAAACCTGA	AAAATATTCT	16080
GAAATGAAGG	CGGCTGGTTA	TGCAGTTATA	GGCGATCCAA	TTAATGGTGG	ATATATTTGG	16140
CTTAATTGGA	GAGAGAGTAT	TCTGGCTTAT	CCGTTTAATT	CTAATACTGC	TAAAATTACC	16200
AATCATGGTG	ACCCTACAAG	ATGGTACTAT	AACGGGAATA	TTGCTCCTGA	TGGGTATGAT	16260
GTCTTTACGG	TAGGTATTGG	TATTAACGGA	GATCCTGGTA	CGGATGAAGC	AACGGCTACT	16320
AGTTTTATGC	AAAGTATTTT	TAGTAAACCT	GAAAACCTATA	CCAATGTTAC	TGACACGACA	16380
AAAATATTGG	AACAGTTGAA	TCGTTATTTT	CACACCATCG	TAAGTGAAAA	GAAATCAATT	16440
GAGAATGGTA	CGATTACAGA	TCCGATGGGT	GAGTTAATTG	ATTTGCAATT	GGGCACAGAT	16500
GGAAGATTTG	ATCCAGCAGA	TTACACTTTA	ACTGCAAACG	ATGGTAGTCG	CTTGGAGAAT	16560
GGACAAGCTG	TAGGTGGTCC	ACAAAATGAT	GGTGGTTTGT	TAAAAAATGC	AAAAGTGCTC	16620
TATGATACGA	CTGAGAAAAG	GATTCGTGTA	ACAGGTCTGT	ACCTTGGAAC	GGATGAAAAA	16680
GTTACGTTGA	CCTACAATGT	TCGTTTGAAT	GATGAGTTTG	TAAGCAATAA	ATTTTATGAT	16740
ACCAATGGTC	GAACAACCTT	ACATCCTAAG	GAAGTAGAAC	AGAACACAGT	GCGCGACTTC	16800
CCGATTCCTA	AGATTTCGTGA	TGTGCGGAAG	TATCCAGAAA	TCACAATTTC	AAAAGAGAAA	16860
AAACTTGGTG	ACATTGAGTT	TATTAAGGTC	AATAAAAAATG	ATAAAAAACC	ACTGAGAGGT	16920
GCGGTCTTTA	GTCTTCAAAA	ACAACATCCG	GATTATCCAG	ATATTTATGG	AGCTATTGAT	16980
CAAAATGGCA	CTTATCAAAA	TGTGAGAACA	GGTGAAGATG	GTAAGTTGAC	CTTTAAAAAT	17040

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CTGTCAGATG	GGAAATATCG	ATTATTTGAA	AATTCTGAAC	CAGCTGGTTA	TAAACCCGTT	17100
CAAAATAAGC	CTATCGTTGC	CTTCCAAATA	GTAAATGGAG	AAGTCAGAGA	TGTGACTTCA	17160
ATCGTTCCAC	AAGATATACC	AGCGGGTTAC	GAGTTTACGA	ATGATAAGCA	CTATATTACC	17220
AATGAACCTA	TTCCTCCAAA	GAGAGAATAT	CCTCGAACTG	GTGGTATCGG	AATGTTGCCA	17280
TTCTATCTGA	TAGGTTGCAT	GATGATGGGA	GGAGTTCTAT	TATACACACG	GAAACATCCG	17340
TAAAGTGTAG	AAATGATAAT	ATCTATGTTT	TGAACGATAC	TTTTAAGAAG	TAGCACTCAA	17400
GAAGAGATTT	AAGTTTACTT	GGTGAAACCT	GTTTTATTTC	TAAGTAAACT	ATCATTGAAA	17460
GGGGAGATGT	TTTCGAAAAC	TTGCACAGAA	AAAGGATTAT	TATTGTCATG	TGTAATTCAT	17520
TACATTGCTC	ACAGTTGATT	TTAAGAGATA	TGAATAAGGA	GAAATCATGA	AATCAATCAA	17580
CAAATTTTTA	ACAATGCTTG	CTGCCTTATT	ACTGACAGCG	AGTAGCCTGT	TTTCAGCTGC	17640
AACAGTTTTT	GCGGCTGGGA	CGACAACAAC	ATCTGTTACC	GTTCATAAAC	TATTGGCAAC	17700
AGATGGGGAT	ATGGATAAAA	TTGCAAATGA	GTTAGAAACA	GGTAACTATG	CTGGTAATAA	17760
AGTGGGTGTT	CTACCTGCAA	ATGCAAAAGA	AATTGCCGGT	GTTATGTTTC	TTTGGACAAA	17820
TACTAATAAT	GAAATTATTG	ATGAAAATGG	CCAAACTCTA	GGAGTGAATA	TTGATCCACA	17880
AACATTTTAA	CTCTCAGGGG	CAATGCCGGC	AACTGCAATG	AAAAAATTAA	CAGAAGCTGA	17940
AGGAGCTAAA	TTTAACACGG	CAAATTTACC	AGCTGCTAAG	TATAAAATTT	ATGAAATTCA	18000
CAGTTTATCA	ACTTATGTCG	GTGAAGATGG	AGCAACCTTA	ACAGGTTCTA	AAGCAGTTCC	18060
AATTGAAATT	GAATTACCAT	TGAACGATGT	TGTGGATGCG	CATGTGTATC	CAAAAAATAC	18120
AGAAGCAAAG	CCAAAAATTG	ATAAAGATTT	CAAAGGTAAA	GCAAATCCAG	ATACACCACG	18180
TGTAGATAAA	GATACACCTG	TGAACCACCA	AGTTGGAGAT	GTTGTAGAGT	ACGAAATTGT	18240
TACAAAAATT	CCAGCACTTG	CTAATTATGC	AACAGCAAAC	TGGAGCGATA	GAATGACTGA	18300
AGGTTTGGCA	TTCAACAAAG	GTACAGTGAA	AGTAACTGTT	GATGATGTTG	CACTTGAAGC	18360
AGGTGATTAT	GCTCTAACAG	AAGTAGCAAC	TGGTTTTGAT	TTGAAATTAA	CAGATGCTGG	18420
TTTAGCTAAA	GTGAATGACC	AAAACGCTGA	AAAACTGTG	AAAATCACTT	ATTCGGCAAC	18480
ATTGAATGAC	AAAGCAATTG	TAGAAGTACC	AGAATCTAAT	GATGTAACAT	TTAACTATGG	18540
TAATAATCCA	GATCACGGGA	ATACTCCAAA	GCCGAATAAG	CCAAATGAAA	ACGGCGATTT	18600
GACATTGACC	AAGACATGGG	TTGATGCTAC	AGGTGCACCA	ATTCCGGCTG	GAGCTGAAGC	18660
AACGTTTCGAT	TTGGTTAATG	CTCAGACTGG	TAAAGTTGTA	CAAACGTAA	CTTTGACAAC	18720
AGACAAAAAT	ACAGTTACTG	TTAACGGATT	GGATAAAAAAT	ACAGAATATA	AATTCGTTGA	18780
ACGTAGTATA	AAAGGGTATT	CAGCAGATTA	TCAAGAAATC	ACTACAGCTG	GAGAAATTGC	18840

TGTCAAGAAC	TGGAAAGACG	AAAATCCAAA	ACCACTTGAT	CCAACAGAGC	CAAAAGTTGT	18900
TACATATGGT	AAAAAGTTTG	TCAAAGTTAA	TGATAAAGAT	AATCGTTTAG	CTGGGGCAGA	18960
ATTTGTAATT	GCAAATGCTG	ATAATGCTGG	TCAATATTTA	GCACGTAAAG	CAGATAAAGT	19020
GAGTCAAGAA	GAGAAGCAGT	TGGTTGTTAC	AACAAAGGAT	GCTTTAGATA	GAGCAGTTGC	19080
TGCTTATAAC	GCTCTTACTG	CACAACAACA	AACTCAGCAA	GAAAAAGAGA	AAGTTGACAA	19140
AGCTCAAGCT	GCTTATAATG	CTGCTGTGAT	TGCTGCCAAC	AATGCATTTG	AATGGGTGGC	19200
AGATAAGGAC	AATGAAAATG	TTGTGAAATT	AGTTTCTGAT	GCACAAGGTC	GCTTTGAAAT	19260
TACAGGCCTT	CTTGCAGGTA	CATATTACTT	AGAAGAAACA	AAACAGCCTG	CTGGTTATGC	19320
ATTACTAACT	AGCCGTCAGA	AATTTGAAGT	CACTGCAACT	TCTTATTCAG	CGACTGGACA	19380
AGGCATTGAG	TATACTGCTG	GTTTCAGGTAA	AGATGACGCT	ACAAAAGTAG	TCAACAAAAA	19440
AATCACTATC	CCACAAACGG	GTGGTATTGG	TACAATTATC	TTTGCTGTAG	CGGGGGCTGC	19500
GATTATGGGT	ATTGCAGTGT	ACGCATATGT	TAAAAACAAC	AAAGATGAGG	ATCAACTTGC	19560
TTAAGTAAGA	GAGAAAGGAG	CCATTGATGA	CAATGCAGAA	AATGCAGAAA	ATGATTAGTC	19620
GTATCTTCTT	TGTTATGGCT	CTGTGTTTTT	CTCTTGATATG	GGGTGCACAT	GCAGTCCAAG	19680
CGCAAGAAGA	TCACACGTTG	GTCTTGCAAT	TGGAGAACTA	TCAGGAGGTG	GTTAGTCAAT	19740
TGCCATCTCG	TGATGGTCAT	CGGTTGCAAG	TATGGAAGTT	GGATGATTCG	TATTCCTATG	19800
ATGATCGGGT	GCAAATTGTA	AGAGACTTGC	ATTTCGTGGGA	TGAGAATAAA	CTTTCTTCTT	19860
TCAAAAAGAC	TTCGTTTGAG	ATGACCTTCC	TTGAGAATCA	GATTGAAGTA	TCTCATATTC	19920
CAAATGGTCT	TTACTATGTT	CGCTCTATTA	TCCAGACGGA	TGCGGTTTCT	TATCCAGCTG	19980
AATTTCTTTT	TGAAATGACA	GATCAAACGG	TAGAGCCTTT	GGTCATTGTA	GCGAAAAAAA	20040
CAGATACAAT	GACAACAAAG	GTGAAGCTGA	TAAAGGTGGA	TCAAGACCAC	AATCGCTTGG	20100
AGGGTGTTCG	CTTTAAATTG	GTATCAGTAG	CAAGAGATGT	TTCTGAAAAA	GAGGTTCCCT	20160
TGATTGGAGA	ATACCGTTAC	AGTTCTTCTG	GTCAAGTAGG	GAGAACTCTC	TATACTGATA	20220
AAAATGGAGA	GATTTTGTG	ACAAATCTTC	CTCTTGGGAA	CTATCGTTTC	AAGGAGGTGG	20280
AGCCACTGGC	AGGCTATGCT	GTTACGACGC	TGGATACGGA	TGTCCAGCTG	GTAGATCATC	20340
AGCTGGTGAC	GATTACGGTT	GTCAATCAGA	AATTACCACG	TGGCAATGTT	GACTTTATGA	20400
AGGTGGATGG	TCGGACCAAT	ACCTCTCTTC	AAGGGGCAAT	GTTCAAAGTC	ATGAAAGAAG	20460
AAAGCGGACA	CTATACTCCT	GTTCTTCAAA	ATGGTAAGGA	AGTAGTTGTA	ACATCAGGGA	20520
AAGATGGTCG	TTTCCGAGTG	GAAGGTCTAG	AGTATGGGAC	ATACTATTTA	TGGGAGCTCC	20580

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AAGCTCCAAC	TGGTTATGTT	CAATTAACAT	CGCCTGTTTC	CTTTACAATC	GGGAAAGATA	20640
CTCGTAAGGA	ACTGGTAACA	GTGGTTAAAA	ATAACAAGCG	ACCACGGATT	GATGTGCCAG	20700
ATACAGGGGA	AGAAACCCTT	GTATATCTTG	ATGCTTGTTG	CCATTTTGTT	GTTTGGTAGT	20760
GGTTATTGTC	TTACGAAAAA	ACCAAATAAC	TGATATTCAA	TGTACATCAT	TATGAATAGG	20820
ATAGCAGGCT	GAAGGGAAGA	CCAGAGTACT	CTGAGGTGAT	GTTAATCAGG	AATCATGGTG	20880
ATGTGGCATG	AATCATCAAT	AACGGATATG	AGGCTGGGCA	GATTGTGCCA	GCCTCATTGT	20940
GGGTTATTGT	TTGTAAAACG	ATAGGACTGG	TCTGGTAATC	ATTTTA		20986

(2) INFORMATION FOR SEQ ID NO: 55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21040 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 55:

CCCAGCAAAA	AGCCATCCGA	AGATGACTTT	TTTGCTATTT	AATTTCTGTA	TAAGTTACTT	60
CCAAGCCACG	CTTAACAGCT	GGACGATTGG	CAATTTTTC	TGCCCATTTT	ACTAGATTTT	120
GATAACTTGA	GGCATCCAAG	AATTTTGCG	AACCTTGTA	AAGATTTCCT	TGAACTAACT	180
GTCCATACCA	AGACCAGATA	GCAATATCTG	CAATCGTATA	GTCATTGCCT	GCAATATAAG	240
GTTTCTGAGC	CAATTCCTTA	TCCAATAAAT	CCAAGTGGCG	TTTCACTTCC	ATCGTAAAAC	300
GGTTAATAGG	ATATTCCAAT	TTTTCAGGAG	CATAATTGAA	GAAATGTCCA	AATCCCCCAC	360
CTAGAAAAGG	TGCTGCACCT	GCTTGCCAGA	ATAGCCAATT	CAAACTTCT	ACCTTTTCCA	420
CAGGATTACT	TGGTAAAAAG	GCTCCAAATT	TCTCAGCAAG	GTAAAGAAGA	ATATGAGCAG	480
ACTCAAAGAC	TCTTACGTTT	TCAGTACCTG	ACTGGTCCAA	TAAGGCTGGA	ATCTTGGAAT	540
TTGGATTGAG	CTTCACAAAG	TCTGATCCGA	ATTGATCCCC	ATCCATGATA	GCAATCTTAT	600
ACAAGTCGTA	AGCCGCTTCC	TTAAAACCAG	CTTCTAGTAA	TTCTTCCAAT	AAGATAGTAA	660
CCTTCACACC	ATTTGGTGTT	CCCAGTGAAT	AAAGCTGAAA	AGCTTGTTCT	CCTTTTGGCA	720
AGTTTTGTTC	GAAACGGGCA	CCTGCTGTTG	GTCTGTTTAG	CCCCGTAAAA	GCTCCTTGAT	780
TACTAGCTTC	ATCCTGCCAT	ACGGTCGGTA	ATTGATATGC	TGACATCCGA	AACCTCCCTT	840
AAATCGCATT	CTTGTCAAAA	CCGAGTTTGC	GTTGAATAAA	CTTAACGATT	TCGACGATGA	900
TAATCATTGA	GAAGCTTCCA	GCCATAACAA	TTCCCCATTG	TGACAAGTCT	AGTTTGGTTA	960
CGTGGAAGAT	TCCTTCAAGC	GGTTCTACAA	CGATTGTTGC	CATGAGAAGG	ATAAAGGATA	1020

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CCAAGATGGA	CCAGTTAAAG	GTCTTAGACT	TGAATGGGCC	AACTGTCAAG	ATGGATTGGT	1080
AGACAGACTT	GACATTGTAG	GCATGGAAGA	GCTGAATCAA	ACCAAGGGTT	GCAAAGGCCA	1140
TCGTTAGGGC	ATCTGCATGA	ATAGCATGAT	TGTCACCCAC	ATGAACTGGG	TAAGCAATCG	1200
CAAGGCCATA	AACACTCATA	ACAAGAGCTG	CTTGGAGTAC	ACCTTGATAA	ATGATAGAAC	1260
TCAAAACACC	ACCTGAGAAG	AAGCTTGCCT	TGCGTCCACG	TGGTTTATGA	TTCATGACAC	1320
CAGGTTCCGC	AGGTTCAACA	CCAAGAGCGA	TAGCTGGGAA	GGTATCCGTT	ACCAAGTTGA	1380
TCCACAAAAG	ATGAACCGGC	TGTAAGACAT	CCCAACCAAA	CAAGGTTGAT	AGGAAGATGG	1440
TTAATACTTC	AGCAGTATTA	GCAGAAAGTA	GGTACTGAAT	AGTCTTTTGA	ATGTTTGAGA	1500
AGACCTTACG	TCCTTCTTCC	ACTGCGACGA	TAATAGTCGC	AAAGTTATCA	TCTGCAAGAA	1560
TCATATCAGA	AGCCCCCTTA	GAAACCTCTG	TACCAGTGAT	TCCCATAACG	ATACCGATAT	1620
CGGCTGTTTT	CAGAGCTGGC	GCGTCATTGA	CACCGTCACC	TGTCATGGCA	ACGACTTTAC	1680
CTTGTTTTTG	CCAAGCCTTG	ACGATACGAA	CCTTGTGTTC	TGGAGACACA	CGGGCATAAA	1740
CAGAGTATTG	ACCAACGACT	TTTTCAAATT	CTTCATCTGA	CAGTTCATTG	AGTTCAGCAC	1800
CAGTTAAAC	GTGACCTTCT	GTATCGTTTG	CGTCAATGAT	TCCCAAACGT	TTGGCAATGG	1860
CTTCCGCTGT	GTCTTGGTGG	TCACCTGTAA	TCATAATTGG	ACGGATTCCC	GCTTCCTTAG	1920
CCACACGAAC	AGCCTCAGCG	GCTTCAGGAC	GTTCAGGGTC	AATCATCCCA	ATCAAACCAG	1980
TAAAAATTAA	ATCATTTTCA	AGCTCTTCAG	AAGTGAGATT	TTCTGGAATA	CTATCGATAA	2040
TCTTATAAGC	ACCTGCAAGG	ACACGCAAGG	CTTGATGAGC	CATTTTCAGAA	TTGTTTGTAC	2100
GAATGAGATT	TGTAACCTTC	TCATCAATCG	GAGCAATATC	CCCAGCCTTA	TCACGAAGAA	2160
GACAACGTTT	TAAGAGTTGG	TCTGGCGCAC	CCTTGACTGC	TACAAGGAAA	CGACCATCTG	2220
GCAATGGGTG	AACTGTTGAC	ATGAGCTTAC	GGTCAGAGTC	AAATGGCAAT	TCAGCTACAC	2280
GAGGATATTT	CTCTAAGAAA	CCTTTGACAT	CATAGCCCTT	GTCCAAGGCA	TATTGGATAA	2340
AGGCTGTTTC	GGTTGGGTCA	CCAATCAAGT	TACCTTCCAC	ATCGATTTTC	GTATCATTGG	2400
CCAAGACAAC	TGAACGAAGT	AGTGGCATT	CAAGACCTAG	TTCAATATCA	TCAGCTGAGT	2460
CATGTAGAAC	CGCATCGTAG	AAGACTTTTT	CGACTGTCAT	CTTGTTTCATA	GTCAGCGTAC	2520
CAGTCTTATC	AGAAGCGATG	ATTTCAAGTTG	AACCAAGTGT	TTCAACTGCT	GGCAACTTAC	2580
GAACGATGGA	ATGTCGTTTG	GCCAAAACCT	GAGTACCAAG	AGAAAGAACG	ATGGTAACGA	2640
TAGCAGGAAG	TCCTTCTGGA	ATGGCTGCAA	CGGCAAGGGC	AACAGAAGTC	AACAACTCAC	2700
CAAGTGGATT	TTTCCCTTGA	ATGAAGACAC	CCACTACAAA	AGTAACAAGG	GCAATGACCA	2760

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AGATAGCATA	GGTCAAGACC	TTAGAAAGGT	TGTTCAAATT	TTGTTTGAGT	GGTGTATCAG	2820
TCTCATCCGC	ATCTTGAAGC	ATACCAGCAA	TATGACCAAC	TTCAGTGTAC	ATACCTGTAT	2880
TGACAACAAC	ACCCATCCCA	CGACCATAGG	TTACGTTTGA	GTTTTGGAAG	GCCATGTTGA	2940
CACGGTCACC	AATACCAGCA	TCTGTCGCAA	GCTCGACTGA	CAAGTCTTTT	TCGACTGGTA	3000
CAGATTCACC	TGTCAAGGCT	GCTTCTTCAA	TTTTAAGAGA	GTTGGCTTCT	ATCAAACGTA	3060
GGTCCGCTGG	TACCACGTCA	CCTGCTTCAA	GGGCAACGAT	ATCGCCTGGT	ACCAATTCTT	3120
TAGAGTCAAT	CTCTGCCATG	TGTCCATCAC	GAAGAACGCG	GGCAACTGGA	CTAGACATGG	3180
ATTTGAGGGC	TTCAATAGCT	TCTTCAGCTT	TTCTTCTTG	GTAAACACCA	AAGGCAGCGT	3240
TGATGATAAC	CACAGCTAGG	ATGATAATGG	CATCTGCGAT	ATCTTCCCCA	CCAGAAGTCA	3300
CGACTGACAA	GATTGctGCC	GCAACTAGGA	TGATAATCAT	CAAATCCTTA	AATTGCTCGA	3360
TGAATTTGAC	CAAGATTGAT	CGTTTCTCGC	CTTCTTCGAG	TTCATTGTGC	CCAAATTCGG	3420
CAAGGCGCTT	TTCCGCCTCA	CTTGATGACA	AACCTTGCTC	GGTCGCATCC	ACAGCCTGCA	3480
AGACCTCTTC	AGGGCTCTGA	GTATAAAACG	CTTGGCGTTT	TTGTTCTTTT	GACATGTGTC	3540
TCCTCCTTGA	CATTGTGTGC	AAAACAGACT	CTCTTTCTGT	CATAGCTTTT	CACGACAAAC	3600
AAAAAGAAAC	CTGTTAATCA	TAACAAGTCT	CGCTGTTTAA	GATAGGGCCG	GAAAGCATAAC	3660
TTTTTCAGCAT	AAAATTCGGA	ATGACGACAC	TATCACAGGT	TTCTGCCAGC	TACTCCCTTG	3720
AGTAGTACCA	TTATACCAA	TTTTGGGGAG	TTTTCAAAGA	GTAAAACTG	CCTTATTTGA	3780
ATTTTTCCTT	GAAAACCAGT	ATAATGGTAG	AATGCTATGT	GACTAGAAAG	GAAGTTGAAT	3840
GAAGCAATCT	ATCTCAAATC	TCAAGTTAGC	TGAGCGTGGA	GCCATTATCA	GTATTTTCGAC	3900
CTATTTGATC	TTGTCTGCAG	CCAAATTAGC	AGCTGGTCAT	CTCCTTCATT	CATCCAGTTT	3960
GGTGGCCGAT	GGTTTTAATA	ACGTATCGGA	CATCATTTGA	AATGTGGCCC	TCTTAATCGG	4020
GATTCGGATG	GCGCGCCACC	TGCAGACCGT	GACCACCGTT	TTGGTCATTG	GAAGATTGAA	4080
GATTTGGCAA	GCTTGATCAC	TTCTATCATC	ATGTTCTATG	TCGGTTTCGA	TGTTCTAAGA	4140
GATACCATTC	AAAAGATTCT	CAGTCGGGAA	GAAACGGTCA	TTGATCCTCT	TGGTGCAACT	4200
CTAGGAATCA	TTTCTGCAGC	GATTATGTTT	GTGGTCTATC	TCTACAATAC	TCGCCTCAGT	4260
AAGAAATCCA	ACTCCAATGC	GCTGAAGGCA	GCTGCTAAGG	ACAATCTTTC	TGACGCTGTT	4320
ACCTCACTTG	GAACCGCCAT	TGCCATCCTA	GCTAGTAGTT	TCAATTATCC	GATTGTGGAT	4380
AAACTGGTTG	CTATCATCAT	CACTTTCTTT	ATCTTGAAGA	CTGCCTATGA	TATCTTCATC	4440
GAGTCTTCCT	TTAGTCTTTC	AGATGGCTTT	GACGACCGCC	TGCTCGAGGA	CTACCAAAG	4500
GCTATCATGG	AAATTCCTAA	AATCAGCAAG	GTCAAATCGC	AAAGAGGTCG	CACCTACGGT	4560

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AGCAACATCT	ACCTGGATAT	TACACTAGAG	ATGAATCCTG	ACTTGTCTGT	TTTTGAAAGC	4620
CATGAAATCG	CGGATCAGGT	CGAGTCTATG	CTGGAGGAGC	GTTTTGGCGT	CTTTGATACC	4680
GATGTCCATA	TCGAACCAGC	ACCTATCCCT	GAGGATGAAA	TTTGTAGACAA	TGTCCTATAAA	4740
AAATTGCTTA	TGCGTGAACA	ATTGATTGAC	CAAGGAAACC	AACTAGAAGA	ACTCTTGACT	4800
GATGATTTTG	TCTATATTCG	CCAAGATGGA	GAGCAGATGG	ATAAAGAGGC	TTATAAGACC	4860
AAAAAAGAGT	TAAATTCTGC	TATCAAGGAC	ATTCAAATTA	CTTCCATCAG	TCAAAAAACC	4920
AAACTCATCT	GCTATGAGTT	AGATGGTATC	ATCCATACCA	GATCTGGCG	TCGCCACGAA	4980
ACCTGGCAAA	ATATCTTTCA	TCAAGAAACC	AAAAAAGAAT	AGAGAAATCC	TTTCATGAGA	5040
CGGGATTTTT	CTATTCTTTT	ATACTCAATA	AAAATCAAAG	TGCAAATTAG	GAAGCCGGTC	5100
ACAGGCTGTA	CTTGAGTCGG	CAATGTGAAG	CCGACATAGT	TTGCACTTTG	ATTTTCGAAT	5160
AGTCTTAACT	ATCAAATTCA	CTGAGATACT	CATAGCGTTC	GTATTTTTC	AGGAGTGCTT	5220
CATTTTCTC	ATCCAATTCT	TTTTGGAGAG	TAGCCAGCTT	ACCAAAGTCA	GAGCCGTTAG	5280
CCTGCATTTT	CTCTTCAATA	GCAGCGATAC	GTTTTTCCAA	GGTTTCAATA	TCACCTTCAA	5340
TACTTGCCCA	CTCCTGCTTT	TCTTGGTAGG	TCATGCGTTT	CTTGTCTTCT	CGAACCTTGA	5400
CCACTTTTTT	CTTTTCGGCC	TTTTGCACCT	GATTGGCCAT	ATCTGTTTCA	AAAGCTTTTT	5460
CATCAAGATA	GTCCGTGTAA	TGACCAAAGA	AAGGACGAAT	CTTGCCATCC	TCAAAAGCGA	5520
GAATCTTGGT	CGCTACCTTA	TCCAAGAAAT	AGCGGTCGTG	ACTGACTGTT	AAAACGGGAC	5580
CTGCAAAACC	TTGCAAGAAA	TTCTCTAAGA	CTGTCAAAGT	TGCAATATCT	AGGTCATTGG	5640
TTGGCTCGTC	TAAAAGAAGA	ACATTTGGTT	TTTCCAAAAG	CAGTTTGAGG	AGATAAAGAC	5700
GTTTTTCTC	ACCCCTGAC	AATTTCTCAA	TCAAAGTCCC	ATGCGTCGAA	CGTGGAAGA	5760
GGAATTGCTC	CAGCAACTCA	GCGATGGAAG	TCGTAGAACC	ACCACTGGTC	TTGACCTCCT	5820
CTGCCACTTC	CTGCAGGTAA	TTGATCACAC	GCTTGCTTTC	ATCCAAACCC	TCAATTGTT	5880
GAGAGAAATA	GGCGATGCGA	ACAGTTTCCC	CAATCACAAC	TTGTCCCTGCT	GTCGGCTCAA	5940
GACTTCCTGC	AATCAGGTTA	AGTAGGGTTG	ATTTTCCAAC	ACCATTGTCC	CCAACAATTC	6000
CAATACGGTC	TTTAGCCTGA	ACTAAGAGAT	TAAAATTTTG	CAAAATGGGC	TTATTTTCAT	6060
AGGCAAAGGA	AACATCCTGA	AACTCGATGA	CTTTCTTCCC	AATCCGACTG	GTTTCAAAGT	6120
TCATAGTCAA	GTCTGTCTCA	GCACTACTGC	CTGAAACTTC	CTTTTTCAGA	TCATGGAAAC	6180
GATTGATACG	AGCTTGTTGC	TTGGTCGCAC	GCGCCTGCGG	TTGTCTGCGC	ATCCAGGCCA	6240
ATTCTTGTTT	GTAGAGTTGT	TCTTTTTTGT	GAAGAAGAGC	CGCGTCGCGC	TCATCCTGTT	6300

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CCGCCTTTAG	GCGAACATAG	TCCTGGTAAT	TTCCCTGGTA	CTCGGTCAAG	CCTGCACGAT	6360
CCAACTCGAA	AATCCGTGTT	GACAAAGCGT	CTAAGAAATA	ACGATCGTGA	GTGATAAAAA	6420
GGACGGTCTT	CTTAGAATTT	TTCAAAAAGA	GGGTCAGCCA	CTCAATAATC	GCAATATCCA	6480
GATGGTTGGT	CGGCTCATCC	AAAAGCAAGA	GGTCGTGGTT	GCCAAGTAAG	ACTTGTGCCA	6540
ACTGTACCCG	TCTTCTCAGA	CCACCTGACA	ATTCCCCAAC	AGGAGTAGAT	AAGTCTTGAA	6600
TGCCCCAATTT	GCTAAGAACG	GTCTTGACCT	GACTTTCGAT	TTCCCAAGCT	TGGAGAGAGT	6660
CCATCTCTGC	CATGACACGT	TCCAAACGCG	CCTGCTTGTC	CTCACTATAG	TCGAGCATAA	6720
TCAATTCATA	CTCACGAATG	AGCTGGATTT	CCTTGAGTTC	ACTAGATAGA	ACCGTATCCA	6780
AAACTGTCTT	TCTATCATCA	AAATCAGGAT	CCTGAGTCAA	GTAACCAATC	TGGTAATCAT	6840
TTTTAGCTGA	AAAAGGACTG	ACATCCCCAT	CAAATCCAGA	AACACCAGAA	AGGACGTCCA	6900
AAAGGGTGGT	CTTGCCAGTC	CCATTGACAC	CGATTAAACC	AATTCTGTCT	AAGTCATGGA	6960
TAATAAAGGA	AATATCCCTA	AAAACGGTCT	TGTCACCAAC	GGATTTACTT	AGTTTTTCAA	7020
CGATAAAATC	ACTCATTTTT	TCTCCCTCAG	GTAAGCATGG	ATGGCTTCAC	GATTATTCTC	7080
CAATTCTCCA	TCGACAATGG	CAAACCAAT	CTCTGTTAAA	ATCTCTCCCA	AGTCTGGGCC	7140
TGGCTGATAG	CCATATTCCT	TGATCAAAAT	ACCGCCATTA	ATCTGAATCT	CTTTCTTGTC	7200
ATGGATAGTC	AAGCTTTGGT	ATTTTCTGT	GATGGCTTGT	GGGTTGACTT	CTTTTCCTTG	7260
AGCTTGACGA	AGATTTTCAG	CCTGTAAAAG	CAAATCTATG	TCAAAGCGAT	AACAATCTCG	7320
CTTGCTCAAT	TCTCCATTTT	CACGCAGAGC	CAAAATAATC	AGCAAATCCT	GAAGTTGCTT	7380
GGCAAACCTGG	CGTGAGGTCT	TCCAAGATTT	CAAAAATGAC	TGCGCATTTT	CAATCTCCAA	7440
AGCCCATAGT	AAAGCCGCCC	AGGCTTGTTT	AGAGGATTCA	AAAGTAAAAT	CAGTCTCCAA	7500
ATCAAACAGT	CTGTTGAGCT	TGTCCTGGCT	AGATGCCATA	TCAGGGAGAT	AGTCATAAGC	7560
TTGACTCTCA	ATCATGGAAG	CCAAGCCCCT	TCTCCAAAAT	GGAGCCAGCA	AGAGTTTATC	7620
AAACTCGACG	AAGGTACGCT	CTACAGAAAT	TTTCTCCAAA	AGCGGCGTCA	AGGTCTTCAT	7680
AGCTTTAAAT	GTTTCTGGCT	CAAGTGCAAA	ACCAAGACTA	GCCTGAAAAC	GGAAACCACG	7740
CATAATCCGT	AAAGCATCTT	CGTTGAAACG	CTCACTAGCC	ACTCCAAGT	CTCGCAAGAC	7800
TTGCTTTTCC	AAATCTTCTA	AACCATGGAA	CAAGTCAACG	ATTTCTCCTG	TCTCATCCAA	7860
GGCAAAGGCG	TTGACTGTGA	AATCACGGCG	TTTGAGGTCT	TCTTCTAGCG	ATCGTACAAA	7920
GGAAACCGCA	CTGGGTCTGC	GATAGTCCAC	ATAGACATCC	TCTGTCCGAA	AGGTTGTTAC	7980
CTCATACTCC	TCATCCCCAT	CTAAGACCAA	GACGGTTCCA	TGCTCGATTC	CGATATCGGC	8040
TGTTGCGCGA	AAAATCTGCT	TGGTCTCTTC	TGGATAAGAA	GACGTCGCAA	TATCCACATC	8100

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GTGGATAGGG	CTATGGAGAA	GGGCATCTCG	AACAGAGCCC	CCAACAAAAT	AAGCCTCAAA	8160
GCCTGCTTCT	TTAATTTTTT	CTAATACTGG	TAAAGCCTTC	TGAAATTCAG	AAGGCATTTG	8220
CGTTAATCTC	ATAATAAGTG	TTCTAATCCA	TAGACAAGCT	CATGACGCTT	GACAACTTCT	8280
TTAATTCCCA	AATTGACTCC	TGTCATGAAG	GAGATGCGAT	CATAGGAGTC	ATGACGGAGG	8340
GTCAACCCTT	CTCCCTGATT	GCCAAAGATG	ACTTCCTGAT	GAGCTACCAA	GCCTGGCAAA	8400
CGAACTGAGT	GGATGCGCAT	ACCATCAAAG	TCAGCACCAC	GAGCACCAGC	AATCAGCTCT	8460
TCCTCATCTG	CTGCACCTTG	CTGAATTGAC	TCTCGAACCT	CTGCCATCAA	CTCAGCTGTT	8520
TTAATGGCTG	TTCCACTCGG	AGCATCCTTT	TTCTTGTCAT	GATGGAGCTC	AATAATCTCC	8580
ACATTTGGGA	AATATTTGGC	AGCCTGCGTC	GCAAATTGCA	TGAGTAAGAC	AGCACCCAAG	8640
GCAAAGTTAG	GGGCAATCAG	GCCACCCAAG	TCTTGGGCAC	GAGAAAATTC	TTTTAGCTCT	8700
GCAATTTCTT	CACTCGTGAA	ACCAGTCGTT	CCAACACTG	GAGCAAAGCC	ATTTTCAAGA	8760
GCAAAACGTG	TATTTTCGTA	GGCAACAGCT	GGAGTAGTAA	AATCTACCCA	GACATCCGCT	8820
TCAAAACCAG	CTAAATCAGC	CTTATCCTTG	AAAACAGGAA	TACCCTGCCA	TTCTGACTCA	8880
GACTCAAAAG	GATCCAAAAC	TGCCACCAAG	TCCAAGTCTG	GATCAGTCAA	TACCATCTGA	8940
CAAGCAGCCT	GGCCCATCTT	TCCCTTAAAA	CCGGCAATAA	TTACTCGAAT	ACTCATCTCT	9000
ACTCCTGTCT	AAGATACAAA	GTCCGTAAGA	ACACAAAGTG	AAAATAGGAA	TTCCAATCAA	9060
GAAGTGCTA	CTTCTTGGA	GAAGTATCTT	TTTCACACAG	GGTTCCAGGC	GTGTTCAATT	9120
ATCAAGATAC	AAAGGACCTT	AGCTGCCTCT	GAAAAATAGG	GAATGGCACT	GACTTTCCAC	9180
GAAAGGCAAG	ACAGGCATCT	TTTTTCAAGA	GGCAGGTAGT	CCGTGTTCAT	TTTCTAAGAT	9240
ACAAGGCATC	TTAACTAGCC	TAGAAGCGCC	AACTAAATCA	CTGGAATATA	ACCCAGAGCA	9300
ATACTTCCTG	CTCCTAGGTG	CGTTCCAATG	ACACTACCAA	ATGTAGCAAG	TGAAACATCC	9360
GAACCCAAGC	CAAATCAAG	CAAGTGCTGA	CGCAATTCTT	CAGCCTTTTC	AGGAGCATTC	9420
CCATGAATGA	CAATGACCCG	GTATTGACCT	GAAGCCGTTG	TTTCCTTGAT	AATTTCAATT	9480
AAGCGCTTGG	TGGCCTTCTT	TTCAGTACGA	ACTTTTTCGT	AACTTCAAT	CACACCTTGA	9540
TCGTTAAAAAT	AAAGGATTGG	CTTAATGCTA	AGCAAATTGC	CCAAAATGGC	AGCCCCATTT	9600
GAAAGGCGTC	CACCTTTTAC	CAAATGATCC	AAGTCATCTA	CCATGATAAA	GGCTGACGTA	9660
CGGCTGATTT	GAATGGCTAG	CTTATCCTGA	ATGCTGGCAA	AATCATCGCC	CTGATCACGC	9720
CAATTAAAGA	CGCTTTCAAC	CATGATGCCT	AGGGGAGCAC	TTGTAATCAA	AGTGTCTGGG	9780
AAAGCAATGG	TTAAGCCCTC	ATAGTCATCG	ACCATATACT	GGATATTTTG	GTAAAAACCT	9840

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GAAATTCCAG	AAGATAGGAA	AAGCCCCAAG	GCATGTGTAT	AGCCTTGTTT	TTTGAGCGAA	9900
GTTAAGATCT	CATCTAACTT	GGCAATACTT	GGTTGACTGG	TCTTAGGCAA	TTCAGAAGCC	9960
TGAGCCATTT	TTTGGTAAAA	TTCTCAGCA	GACAGATTGA	TGCCTTCGAC	ATATTCCTCA	10020
CCATCAATAT	TGACAGGAAT	ATCCAAGACA	AACAAGTCTT	CTCTTTGCAA	GATCTCTGCA	10080
CTGAGATAAG	CAGAGGAATC	TGTGAAAACA	GCTAATTTCA	TATTAGAACT	CCAAATTAAT	10140
TCCTGGTAAG	TCTAATGCAA	TTTCAGTCAC	TTCGTAAGTC	AAACGATTGA	GCATGTTCAA	10200
ACATGGACGA	GCCAAGGTTT	CCACCTCTTC	TTGGTTCAAT	TCACTTGGTT	CATTGACAAT	10260
ACGGCCATCG	ATATGGTTTA	CTTGTGAGAT	TGTTCCACTA	ATGACAAACT	TATCAAATAC	10320
AATCATAAAG	CTCAAGATGA	CAATCAAGGA	AGTCACTTGA	TTTTCTTGGT	CATGTTGGAG	10380
CAATTGGAAA	TTCACATCCA	CCTTGGTTTC	AGGAGCTCCA	TTTTCATTTT	CCCATTCAAA	10440
ATTACGCGCA	TCAAAATGAT	ACTGACTAAC	AAATTCCTGT	TCACGTTTAA	GATTCATGTC	10500
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TTTCTAGGAT	TTAGTCAATC	CCAATTTTCA	CACGAACTAC	ATCTGTGATG	GTATCAACAT	10620
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CACTTGGACG	AACAAGGATA	CGGCCGTTCC	CCGCCATTTT	TTCTTCCATC	TTCTCGATGA	10740
TGGCCTTGAT	AGCTGGCACT	TCCATGGCCT	TTTCCTTCAT	GACGTTTTCC	ACTCGGATAT	10800
TAACTAATTT	TTGTGGATAA	ATCGTTACTT	CTGCCGCCAA	CTCTGATAAG	CTCTTACCAG	10860
TTTCCTTCAT	GATTTTAGTC	AATTGAACTG	CTGATAATTG	ACCATCACCT	GTGGTATTGT	10920
AATCCATCAA	GATAACGTGA	CCAGACTGTT	CACCACCAAG	GTTGTAGCCT	GATTTTCTCA	10980
TTTCTTCAAC	AACGTAGCGG	TCACCAACTG	CAGTAACTGC	CTTGTTAATA	CCTTCGCGAT	11040
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TGTCACCATT	CTCATCAACA	GCAATCAAGC	GGTCACTGTC	TCCATCAAAG	GCCAAACCAA	11220
TAGCTGACCC	ACTTTCTTTG	ACCACTTCTT	GAAGGGCTTC	TGGATGTGTT	GAACCAACAT	11280
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CTGCAAAGAT	TTGACGGGCA	CTGGTAGAAG	CTGCTCCATT	AGCTGTATCC	AAGGCAACCT	11400
TCATTCCATC	AAGAGGAGTT	CCAGTTGAAA	CAAGGTATCC	TTCATACTTA	CGCArGctTC	11460
TGGATAATCT	ACCAAAATTC	CTAAGCCTTC	TGCACTTGGA	CGAGGAAGAG	TGTCTTCCTC	11520
AGCATCTAGC	AAGGCTTCAA	TTTCTGCTTC	TTTTTCATCA	TCTAGTTTGA	AGCCATCACC	11580
GCCAAAGAAC	TTGATTCCGT	TATCAAGGGC	TGGGTGTGG	CTAGCAGAAA	TCATGACACC	11640

GGCACTTGCT	CCTTCAGTTT	CAACCAAGTA	AGCTACTGCT	GGTGTGCAA	GGACACCAAG	11700
TTTGTATACG	TGAATCCCTA	CTGAAAgGAG	ACCTGCCACC	AAGGCCGATT	CCAACATTTTC	11760
CCCTGAAATA	CGTGTGTCAC	GTCCTACAAA	GACTTTCGGC	GCTTCCGTTT	CATGTTGACT	11820
AAGAACATAG	CCTCCAAAAC	GTCCTAGTTT	AAAGGCTAAT	TCTGGTGTTA	GTTCTAGGTT	11880
AGCTTCTCCA	CGGACTCCAT	CAGTCCCAAA	ATATTTACCC	ATTGTTATAA	AATCCTTTTC	11940
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AAAGGTACTG	AACCACTGTA	ATTACCTGTT	ATACGTTTCG	TAGTTGGCAA	AACAGCGATA	12180
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ACCATGACAT	TTTCAATTTG	TACCCGACTA	TCAATTTGAC	TAGGGTCAAT	CTCTGGTACA	12300
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ACACCGGCAT	CTGTTAGGTC	AGCAGTAACC	TTGAATTTAC	GTGTACTTTC	TTGCATTTCA	12480
CTAGCTAGCG	ATAGGCGATT	TGCACCAGTC	AAGACCACTG	ATACTTCTGA	AGCAAAACCG	12540
CTAATAAAAT	ACTTATCACT	ATTATAGCGT	ATGTCAATAG	GGACATTTGT	TACTGTATTA	12600
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GCATAGACAA	ATAAGACACA	AGCAAAAAAG	AGTGAGGATA	TGATATATAA	ACTATTTTTT	12720
TTCATGTTTC	CATCCTCCTA	GCAATCGTTC	TTTAAAACTA	AGACCCACTT	CCTCTTTTGG	12780
AAGTAAGATT	TCACGTAATT	CTGTTTCAAA	TTCATCAAGT	GTTAGGTTGT	GCTTAAACCT	12840
TCCATTATAG	GTTATCGAAA	TTCTTCCCGT	TTCTCTGAT	ACGACAAAAG	TCAAGGCATC	12900
TGAGACTTCT	GATAAACCGA	TAGCCGCCCG	GTGTCTGGTC	CCAAATTCCT	TGGAAATCCC	12960
TGTGTTTTTT	GTCAAGGGCA	GATAGGCAGA	CGTCACAGCG	ATACGTTCTT	CTTTGATAAT	13020
CACCGCACCA	TCATGTAGGG	GAGTGTTGGG	AATAAAAATG	TTAATGAGAA	GTTCTGCAGA	13080
AATCTTAGCA	TCCAAGGGAA	TTCTGTGCGA	AATATACTCC	TGCAAGGTAC	GTACACGCTG	13140
AATAGCAACC	AAGGCCCCGA	TTTTACGAGG	ACTCATGTAT	TCAACAGACT	TAACAAAGGC	13200
ACGAATCATC	TGTTCCCTCAG	CACTAATAGG	GGCATTTGGA	AAGAAATCTG	TCGCTCTTCC	13260
CAAACGTTCC	AAACCAGTCC	GAATCTCTGG	AGAGAAGATA	ACAACCGCCG	CAATAACCCC	13320
ATAAGTAATA	ATTTGATTGA	TTAACCAAGA	AATCGTAGTC	AAACCAATCA	TATTTGCAAG	13380

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GATTTGAGCT	AAAATAAACA	CCAAAACCTCC	ACGTACCAAA	ATCATAATCT	TGGTTCCTGC	13440
AATAGCTTTT	GTAAAATGGT	ATAAAATATA	AGCAACAATC	AAAATATCAA	TCAGATTGAT	13500
AGCTATCGTC	CATGGACTTG	CAAACAAACT	GGTCCAATAT	TGCAGATTGG	ATAATTGTTG	13560
AAAATTCATC	CCTGATATCC	TCCCTATCAA	AACACTTTTCG	TCCTATTATA	CCATTTTCTG	13620
GCATTTTTTT	CCCTATCCTA	GTCCATTTTA	CATTGAACAA	AAATATGATA	AAATAAACTG	13680
ACTAAAAAAA	ACAAAGGAGA	AACTATGTCT	CAACTCTATG	ATATTACCAT	TGTGGGTGGT	13740
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CAGCTAAATG	GATTTGATAC	CCCTATTCAT	CTCAATGAAA	CGGTTCTTGA	GATTGACAAA	13980
CAAGAAGAAT	TTGCCATCAC	AACTTCTAAA	GGAAGTCACC	TGACTAAAAC	AGTTATCATC	14040
GCTATGGGTG	GCGGTGCCTT	CAAACCACGT	CCGCTGGAAC	TTGAAGGGGT	TGAGGGCTAT	14100
GAAAATATCC	ACTACCACGT	TTCTAACATT	CAGCAATACG	CTGGTAAGAA	AGTGACGATT	14160
CTTGGTGGGG	GAGACTCGGC	TGTGGATTGG	GCTTTGGCTT	TTGAAAAAAT	CGCACCAACT	14220
ACCCTTGTTT	ACCGCAGAGA	TAATTTCCGT	GCCTTGGAAC	ACAGTGTTCA	AGCCTTGCAA	14280
GAATCATCTG	TAACCATCAA	GACACCATTG	GCCCCTAGCC	AACTCCTTGG	AAATGGAAAA	14340
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GACCACCTCT	TTGTCAACTA	TGGTTTCAAA	TCTTCTGTCT	GTAACCTTAA	AACTGGGGG	14460
CTCGACCTCA	ACCGTCACAA	GATTATCGTC	AACAGCAAAC	AGGAATCCAG	CCAAGCAGGT	14520
ATCTATGCTA	TCGGTGACTG	CTGCTACTAT	GACGGAAAAA	TTGATCTGAT	TGCGACAGGC	14580
CTCGGAGAAG	CTCCAAGTGC	TGTCAACAAC	GCTATCAACT	ACATTGACCC	TGAACAAAAA	14640
GTACAACCAA	AACACTCTAC	TAGTTTATAA	AAAAGAACCA	CGAGTCACAT	AGGATTCGTG	14700
GTTTTATAAT	TCATCCGCTA	TCTTATTGAT	TTTTCTGAGT	CTGTGATTGA	CACCACTTTT	14760
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CCTCAGTTGC	GCCACTTCCT	GCAAATCTAC	TGGCAAATTT	TCTAAGCCCA	TGATATCTTT	14880
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TGTCTCGGCA	TTATTAGCCC	GATTGAGGTC	GTTACGGGTT	TCTCGCAAAA	TCTTAACCCG	15000
CTCAAAATCA	TCACGTGCCT	GCATGGCTCC	TATTACTATC	AAGAAGTCCA	TAATGTCTTC	15060
TGCTCGCTGG	AGATAGGTCA	CAGCCCCCTT	CTTGCGCTCA	AGCACCTTGG	CATCCAGTAA	15120
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